
REGULA
Quinque Ordinum
ARCHITECTURÆ
Auctore
I. B. VIGNOLA.
Aucta et Emendata
per
Josephum Moxon.
LONDINI.
Ex Officina Josephi Moxon.

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52 B10

# *VIGNOLA:*
## OR, THE
# COMPLEAT
# Architect.

Shewing, in a plain and easie Way, the Rules of the *Five Orders* in Architecture, *viz. Tuscan, Dorick, Ionick, Corinthian* and *Composite.*

Whereby, any that can but Read and Understand *English*, may readily learn the *Proportions* that all *Members* in a *Building* have one unto another.

*Set forth by Mr.* James Barozzio *of* Vignola.

Translated into *English* by *Joseph Moxon.*

**The Fourth Edition with Additions.**

2 Chron. 33. *Now these are the Things wherein* Solomon *was instructed for the Building of the House of God,* &c.

*LONDON,*
Printed and Sold by *J. Moxon* at the *Atlas* in *Warwick-Lane*, and at his Shop in *Westminster-hall*, right against the *Parliament Stairs*, 1694.





# To the Ingenious ARTIST.

I *Have here preſented you with the Works of Mr.* James Barozzio *of* Vignola *in* Engliſh, *who for his great Skill and Knowledg in the Art of* Architecture, *is much reſpected, and highly applauded among all Artificers throughout* Chriſtendom, *there being few Nations of any note, that have not his Works tranſlated into their own Language: Only we here in* Eng and *(I know not whether it be through careleſneſs of* Artiſts, *or elſe Covetouſneſs) mind not thoſe things which make other Countries (that have nothing elſe to boaſt of) ſo famous among their Neighbours: Certain I am, that* England *breeds as good Wits as other Lands do, and would they but ſhew themſelves more forward in commendable Studies, would doubtleſs ſhare with them in their Praiſes.*

*Our Author firſt Collected thoſe things together for his own private uſe: And by the Solicitations of many Perſons of Worth and Honour, did at laſt (though unwillingly) conſent to make the World for a ſmall price, partakers of that which coſt him ſo much labour, ſtudy, and travel.*

# To the Reader.

*And whereas former Authors left their Works uncertain, or at leaſt doubtful to all but their own Nations, in reſpect of the ſeveral meaſures they uſed; as ſome the Fathom, ſome the Foot, ſome the Span, ſome the Inch of their own particular Country, which ſeldom agrees with the Fathom, Foot, or Inch of any other Land; our Author to avoid that great inconvenience, and certain uncertainty hath reduced all his meaſure, to a convenient and univerſal meaſure, which is called by the name of a* Model: *The invention whereof hath made the whole Art of* Architecture *very eaſie to all Students therein: For it is nothing elſe but the half Diameter of the Collumn at the lower end thereof; as if the whole Diameter ſhould be* 10, 12, 14 *or* 16 *inches, then will the half Diameter be* 5, 6, 7, *or* 8 *inches, and that is called the* Model: *Which* Model *he divides into* 12 *equal parts, when he Frames the* Tuſcan *and* Dorick *Order: And into* 18 *for the* Ionick, Corinthian *and* Compoſite.

*In the Tranſlation of this Book, I have followed (ſo near as I could) the words of our Author, unleſs here and there I have been a little more large, thereby endeavouring the better to expreſs his meaning, and inſtruct the Young Practitioner. I confeſs the Book was formerly tranſlated by another hand, but it was ſo generally diſliked (indeed not without cauſe) that I choſe rather to take the pains to tranſlate it a-new, than run the hazzard of diſcouraging Young* Artiſts *with thoſe dark and unproper directions.*

*Now for the better Inſtruction of ſuch as deſire to ſtudy this pleaſant, profitable and commendable Art,*

*and*

*nd yet are diſheartned by the ſtrange words uſed herein; I have Collected all the hard words together, nd given you the meaning of them: And ſo when ou find your ſelf puzled with any word of Art, you eed but have recourſe to this Alphebetical Table, nd find the Explanation of any hard word uſed in his Book.*

A

Abacus, *the member marked* L *in number* V. Anulets, G *numb* X. Architrave. *numb* I. *word Architr.* Aſtragaloes, B. *numb* XV.

B

and, B *numb* IV. Baſe, *word Baſe numb* I.

C

Capital, *numb* I. *word Capital.* Cathetus, *a line drawn from the top of any thing to the bottom.* Cimatium, L *numb* V. Compoſite Order, *read numb* XXV. Corinthian Order, *The name of Collumns made after the manner deſcribed in numb* XIX. Cornice, *numb* I. *word Cornice.*

D

entils, B *numb* X. Diagonal line, *a line drawn from the two oppoſite Angles in a Square.*

E

quilaterial Triangle, *a Triangle whoſe ſides are of equal length.*

F

lutes, D *numb* X. Frieſe, *numb* I. *word Frieſe.*

G

roeves, A *numb* IX. Gula *or* throat F. *numb* V.

I

hnography, *the Ground or Plot on which any thing is projected.* Interſection, *the point where*

*where two lines crosse one the other.* Ionic Order, *The name of Collumns made after th manner described in numb* XII.

L

Lift, C *numb* V.

M

Metops, D *numb* X. Model, *I have just now to you what is in this Epistle.* Modilion, *numb* X.

O

Overture, *an Arch as is described between th Collumns in numb* VII. Ovolo, A *numb* V.

P

Pedestal, *That whereon the Collumn stands, as i numb* VI. Perpendicular, *a line that cuts second line at right angles, is said to be perpen dicular to the second line.* Pilasters, *the Pilla that stand behind the Collumns, whereon th Arches rests: see numb* VII. Plinthus, D *numb* IV. Profile, *see* Ichnography.

Q

Quadrant, *The forth part of a Circle.*

R

Right angles, *right angles are neither more nor le then square Corners.*

S

Scroll, *The winding figure in numb* XVIII *is calle a Scroll.* Scotia, A *numb* XV. Semi-circle *half the circumference of a Circle.* Spiral line *the two outmost lines of the wreathed Collumn, numb* XXX. *are called Spiral lines.* Swathe, th *same that* Band *is.*

# To the Reader.

T

Triglyph, D, *numb* X. Tondino, B *numb* V. Torus, A *and* B *numb.* XXII. Tuſcan Order, *the names of Collumns made after the manner deſcribed in numb* I.

V

Voluta, *the ſame that* Scroll *is,*

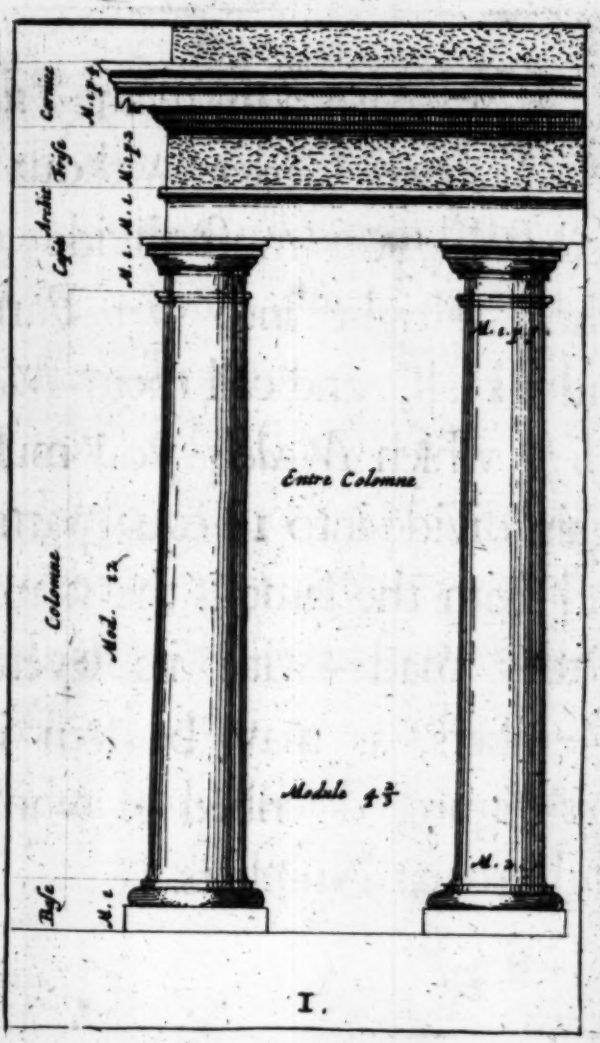
*The underſtanding of this Table is ſo eaſie, that I ſhall not need to explain any thing in it, that I know of: Only take notice that where you ſee a Letter, as B C, &c. and numb* I. V. X. *or the like follow any word, that then you are referred to the leaf marked with that number; therefore in that leaf ſeek for the ſame Letter, and the Member that that Letter ſtands in, is called by that name.*

*I know ſome that are already ſufficient* Artiſts, *may think the ſleighter of this Book, meerly becauſe I have made it plain to common Capacities: But if ſuch will but look back upon their own younger endeavours, they may perhaps remember the time when themſelves would have been glad of any help that might have furthered them in their then-thought tedious and difficult Studies. Beſides they may alſo know, that it is eaſier for themſelves to know the meaning of plain and eaſie expreſſions, than for young Students to underſtand the directions of hard and difficult Inſtructions.*

Joſeph Moxon.

## I.

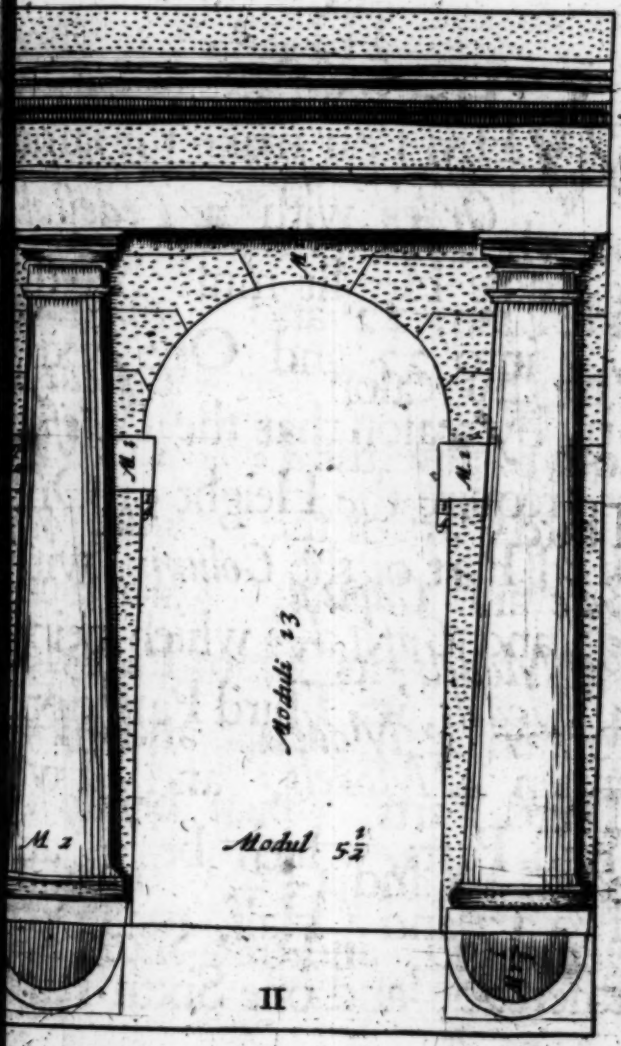
BEcauſe I have not found among the Antiquities of *Rome* any *Tuſcan* Ornaments, from whence I might frame a Rule, as I have done in the other Orders, *viz*. *Doick*, *Ionick*, *Corinthian* and *Compoſite*, I have made uſe of *Vitruvia* his Authority, in his 4*th* Book and 7*th* Chapter: Where he ſaith, The *Tuſcan* Order with *Baſe* and *Capital* muſt be 7 times its thickneſs: In the reſt of the Ornaments, namely the *Architrave Frieſe* and *Cornice*, I believe that Rule ought to be followed which I found in the other four Orders, *viz*. that the *Architrave Frieſe* and *Cornice* muſt be one fourth part of the *Collumn* with *Baſe* and *Capital*, which is 14 *Models* as may be ſeen in the figure; And therefore the *Architrave Frieſe* and *Cornice* ought to be 3 *Models* and on half, that being one fourth part of the 14 *Models* contained in the *Collumn*; as ſhall be mentioned in ſeveral other places.


Cornice
Frise
Chapiteau
Entre Colomne
Colomne
Mod. 12
Module 4 3/5
Base

I.

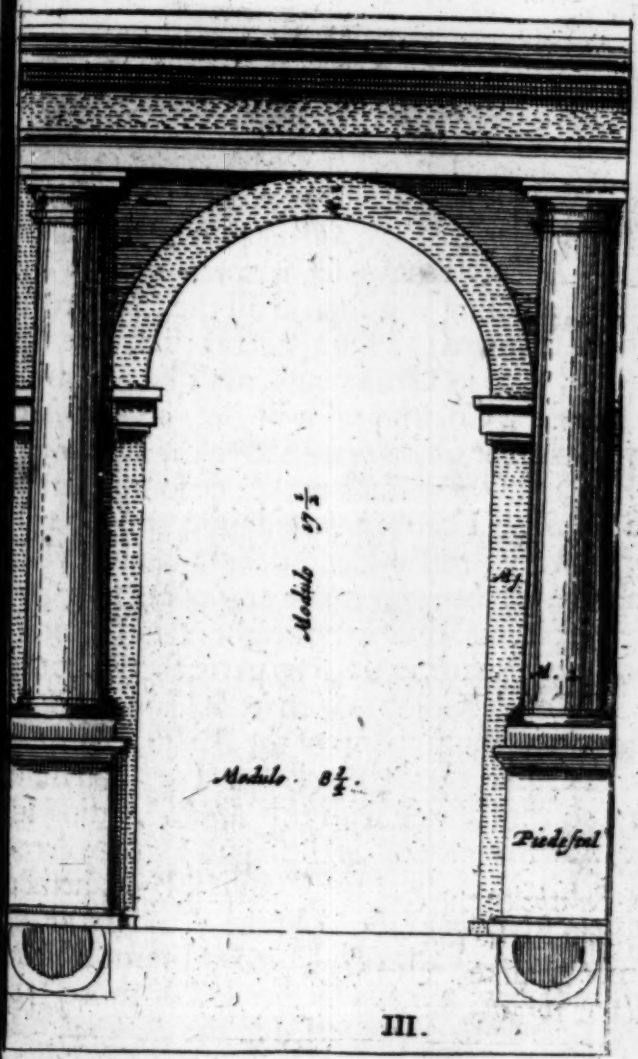
II.

WHen you make the *Tuſcan* Order without a Pedeſtal, you muſt divide its whole Height into 17 Parts and a Half, and call them *Models*; which *Models* you muſt again divide into 12 equal parts; and from the ſame is the whole Order made with its ſeveral Members, as may be ſeen in this Figure, deſcribed in whole and broken Numbers.


A
A 1
A 1
Moduli 13
M 2
Modul 5 1/2
II

## III.

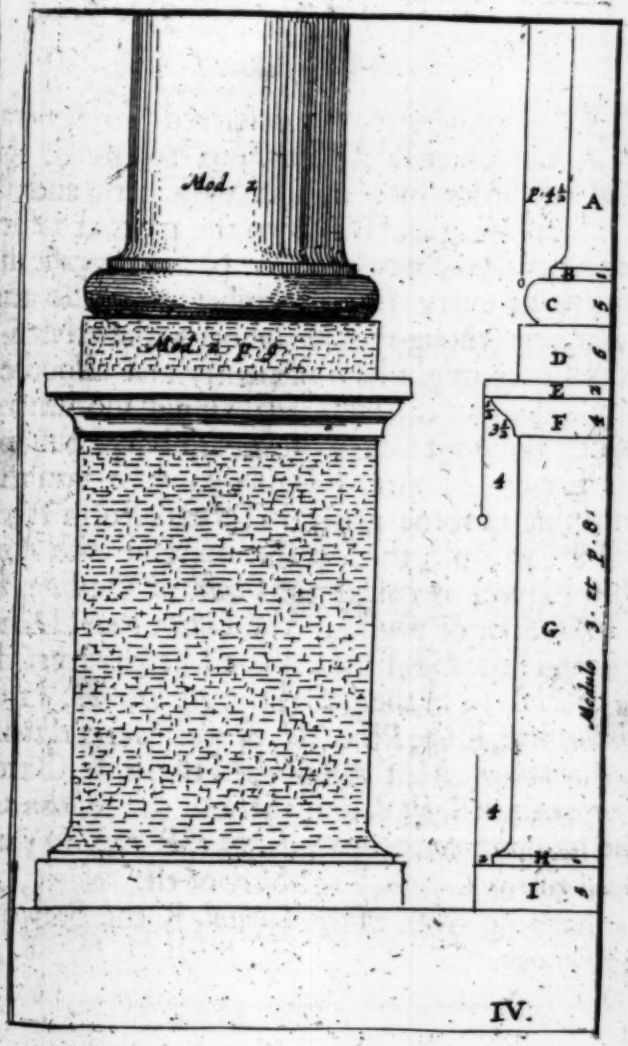
WHen you make the ſame *Order* with a *Pedeſtal* the whole Height muſt be divided into 22 and One Sixth Part, by reaſon that the *Pedeſtal* doth require the Height of One Third Part of the *Column*, with *Baſe* and *Capital*, which being 14 *Models*, its Third Part doth contain 4 *Models*, and Two Third Parts, which being added to 17 and a Half, make together 22, and one Sixth Part




III.

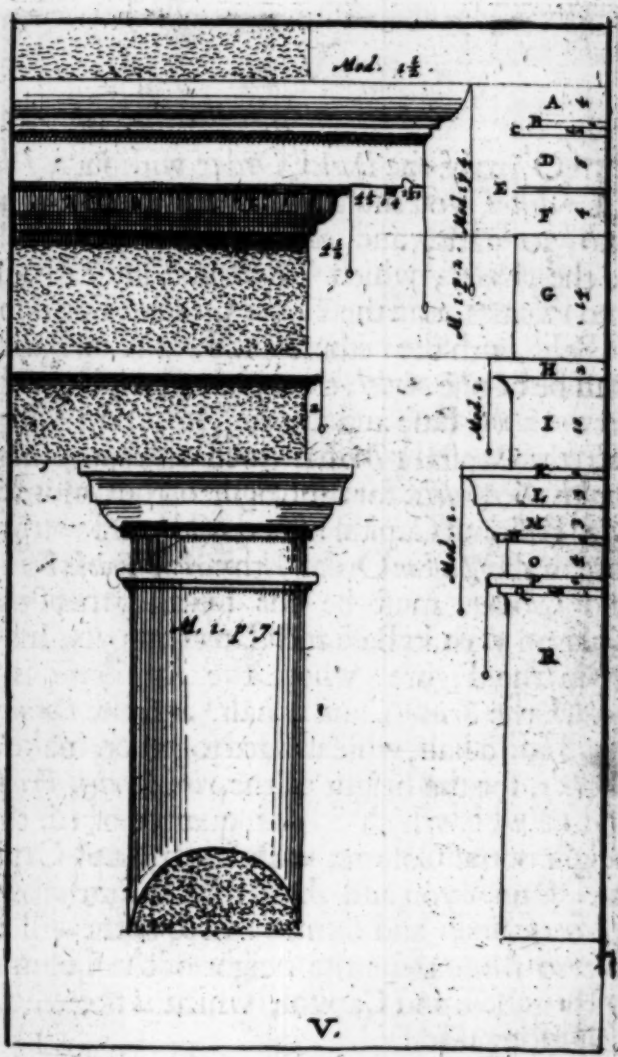
# IV.

THough it ſeldom happen in the *Tuſcan* Order to have a *Pedſtal*, yet to follow the Order, I have ſet it forth in this Figure; adviſing you that in all the five Orders I have followed this for a general rule, that the *Pedſtal* with its Ornaments, muſt be one third part of the Column with its *Baſis* and *Capital* even as in the Ornaments above, the *Architrave*, *Frieſe* and *Cornice* muſt make one fourth part of the ſame. This being well underſtood, will prove very profitable and delightful unto your labour; for being to make any of the five Orders, you muſt divide the height of the Column with its Ornaments into 19 parts, then take the height of the Column with its *Baſis* and *Capital*, and make the diviſions of the *Models* according to its Order, *Dorick*, *Ionick*, &c. Then you muſt frame the Fabrick with this *Model*, dividing its parts as may be ſeen in the Figure: where A repreſents the Body of the Column, B the nether *Band* or *Swathe* of the Column, C the *Torus*, D the *Plinthus*, E the *Liſt*, (a general name uſed in all members alike, whether leſs or more,) F the *Gula* or *throat*, reverſed in the *Pedeſtal*.


Mod. 1.
Mod. 2. P. 8.
P. 4½
A
B
C
D
E
F
G
I
Modulo 3. ex P. 8.
IV.

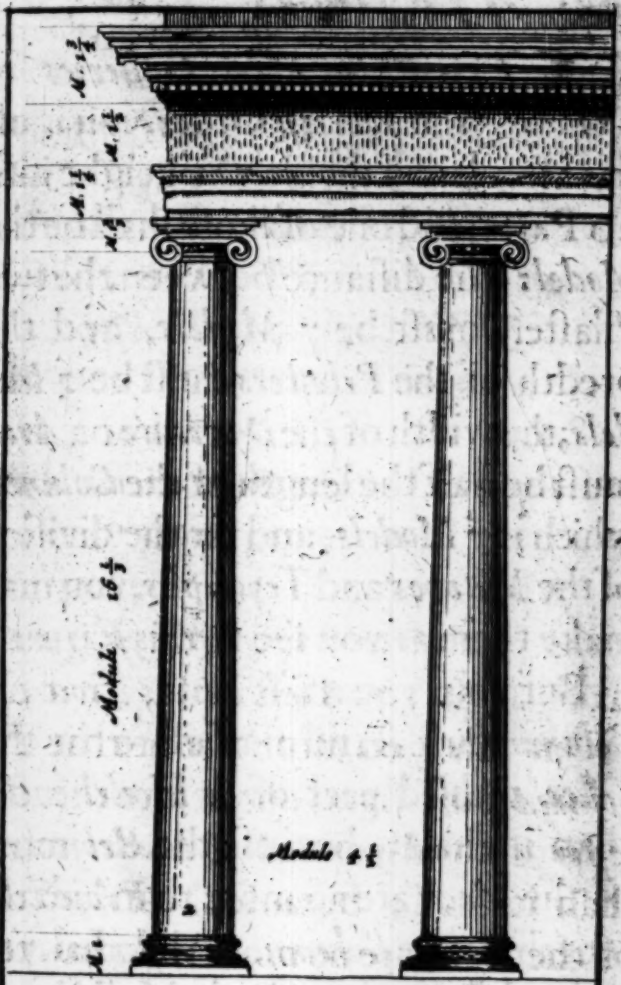
# V.

HAving heretofore deſcribed in genera the chiefeſt Dimenſions to make th *Tuſcan* Order by; and having here and i the fore-going leaf ſet down the parts at large to the end you may ſee in the particulars the di viſion of every ſmall member, and alſo the Draughts (though the Draughts with the Mem bers alone might be ſufficiently underſtood o any ingenious capacity without any Commen upon them) yet for the more eaſie inſtructing o all Lovers of Art, I ſhall alſo give you the meaning of ſome general Terms uſed in Art as for Example, the Member marked with A i this Figure, is called the *Ovolo*, or the Egg, B the *Tondino*, or round, C the *Liſt* or *Rule*, D the *Crown*, E the *Liſt*, F the *Gula* or Throat reverſed, G the *Frieſe*, H the *Liſt* of the *Archetrave*, I the *Archetrave*, K the *Liſt* of the *Abacus*, L the *Abacus* or *Cimatium*, M, the *Ovolo*, N the *Liſt*, O the *Frieſe* of the *Capital*, P the *Neck* of the *Column*, Q the hanging over of the *Capital*, R the *Body* of the *Column*.


Mod. 1½.
A
B
C
D
E
F
G
H
I
L
M
O
R
Mod. 1. p. 2.
Mod. 1. p. 3.
Mod. 1.
Mod. 1.
Mod. 1

# VI.

TO make the *Dorick* Order without a *Pedeſtal*, you muſt divide the whole height into 20 parts, and one of thoſe parts ſhall be the *Model*; which *Model* you muſt divide into 12 parts, as in the *Tuſcan* Order; The Foot or Baſis, with the nethermoſt Swathe or Band, ſhall be of one *Model*; the height of the Column between the Baſe and Capital, ſhall be 14 *Models*; the Capital 1 *Model*, which added together, make 16 *Models*, for the height of the Column, with Baſe and Capital: Then (as I told you before in the *Tuſcan* Order) thy *Architrave*, *Frieſe* and *Cornice*, muſt be one fourth part of the Column with its Baſe and Capital, as you may ſee in the Figure: where the *Architrave* is 1 *Model*, the *Frieſe* 1 and a half, and the *Cornice* 1 and and a half, which added together, make 4 *Models*, for the height of the *Architrave*, *Frieſe* and *Cornice*, which is one quarter of 16. the height of the Column with its Baſe and Capital. And if you add the 4 *Models* for the *Architrave*, *Frieſe* and *Cornice* to 16, there will ariſe 20 *Models*, for the height of the Column with its Baſe and Capital; which is the whole height, as aforeſaid.

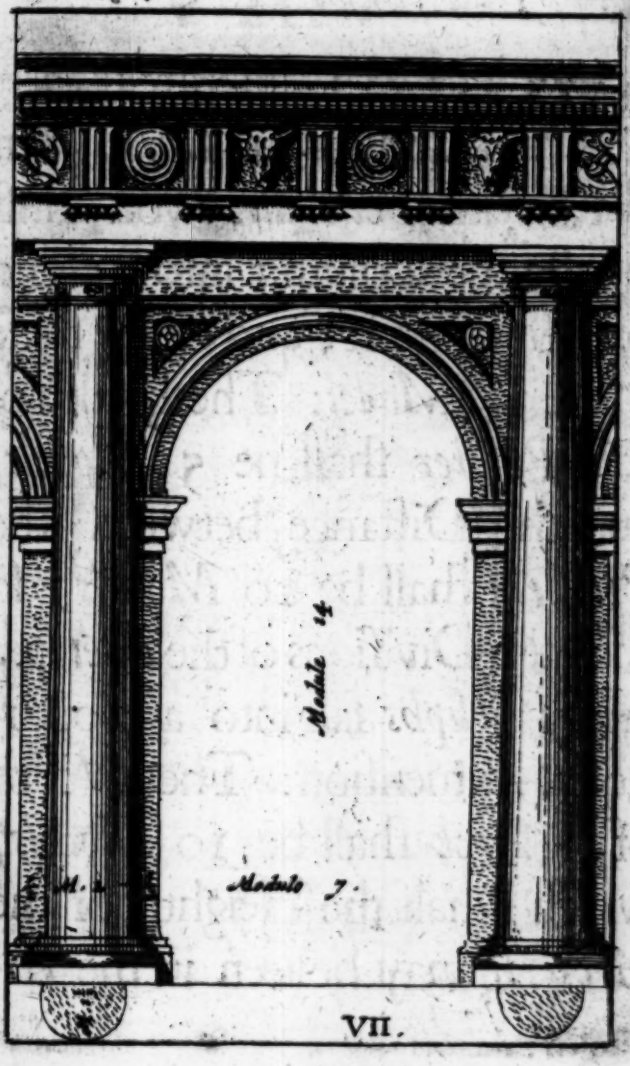



XII.

## VII.

WHen you make *Galleries* of the *Dorick* Order, you muſt (as aforeſaid) divide the height into 20 Parts, and one of thoſe ſhall be the *Model*: The diſtance between the two Pilaſters muſt be 7 *Models*, and the bredth of the *Pilaſters* muſt be 3 *Models*; the width of the *Overture* or *Arch* muſt be half the length of the *Column*, which is 7 *Models*, and for the diviſion of the *Metopes* and *Trygliphs*, you may make them as you ſee in this *Figure*.

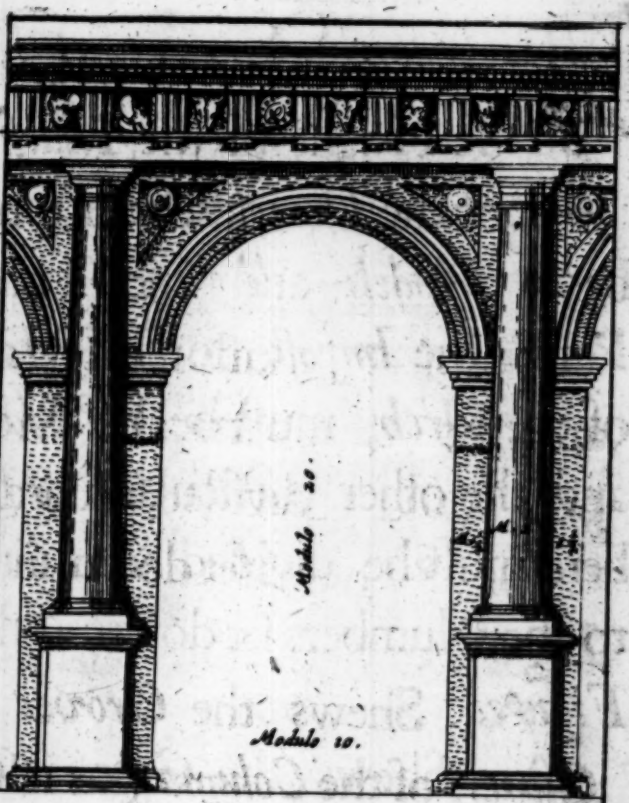
But this you muſt note, that the *Column* muſt ſtand out before the *Pilaſter* 1 third part of a *Model* more than its half; becauſe the *Projectors* of the *Arch* are no more than half the length of the *Column*. And this you may obſerve for a Rule in all the other Orders upon the like Occaſion.




VII.

## VIII.

WHen Galleries are to be made after the *Dorick* Order, with *Pedestals*, you must divide the Column into 25 and one third Part; and one of these make the *Model*: The bredth of the *Pilaster* shall be 5 *Models*, and the Distance between the *Pilasters* shall be 10 *Models*; so shall the Divisions of the *Metopes* and *Trigliphs* fall into a proportional Dimension: The Width of the *Arch* shall be 10 *Models*, which is half the Heighth of the *Arch*, as may be seen in the *Figure*.

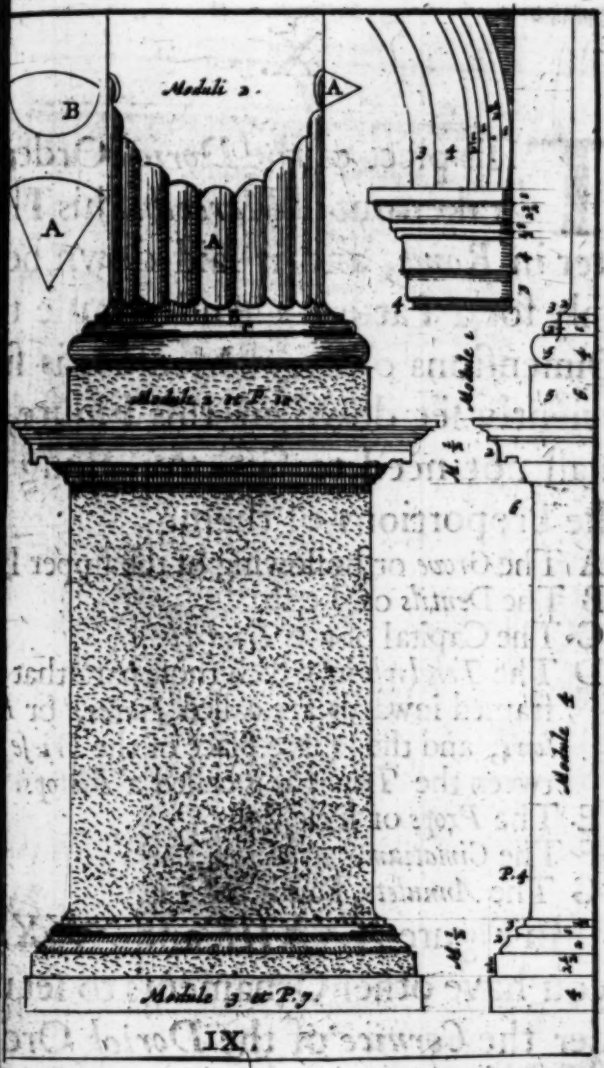



VIII.

## IX.

THe Height of the *Pedeſtal* of the *Dorick* Order, muſt be 5 *Models* and one Third Part; the *Impoſt*, or ſeting on of the *Arch*, muſt be 1 *Model*; and the other particular Members muſt be divided according to the Numbers ſet down in the *Figure*.

A. Shews the *Groves* or *Gutters* of the *Column* (as it ſhall be called in all the other *Orders*) and the *Round*.


Moduli 2.
B
A
A
A
Module 2 at P. 10.
Module 1.
Module 4
P. 4
Module 3 at P. 9.

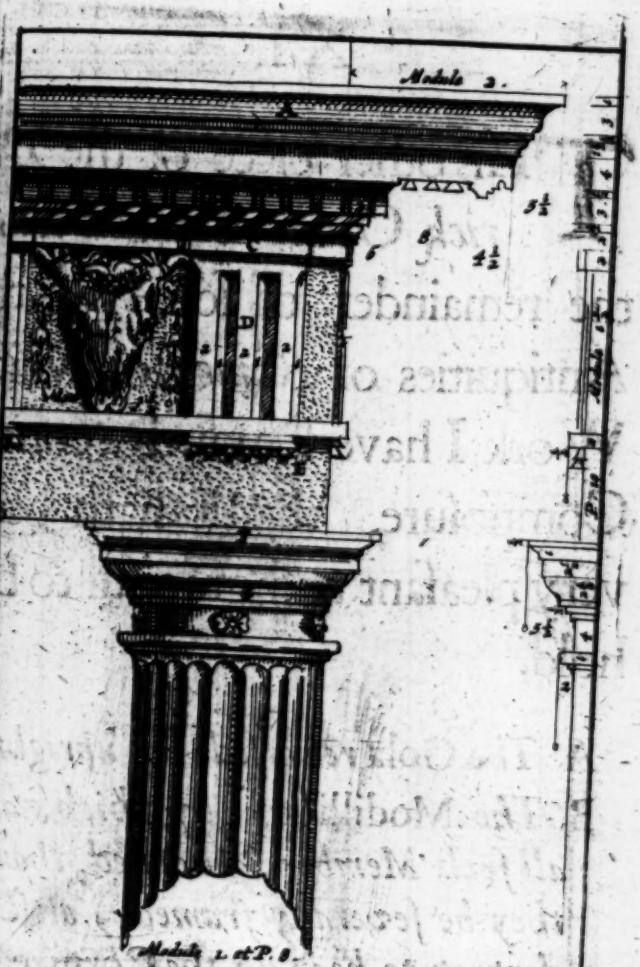
IX.

## X.

THis piece of the *Dorick* Orde
taken out of *Marcellus* his Th
ater in *Rome*, and is laid down h
only for a Pattern: And becauſe t
Dimenſions of every Member is ſ
ficiently ſet down in this Figure,
ſhall not need to ſay any thing
the Proportions of them.

A The *Grove* or hollowing of the upper I
B The *Dentils* or Teeth.
C The Capital of the *Triglyph*.
D The *Triglyph* in which thoſe parts that
framed inwards are called *Flutes*, or
*lows*, and the ſquare place of the *Frieſe*
tween the *Triplyphs* is called a *Metops*.
E The *Props* or little Bells.
F The *Cimatium*.
G The *Annulets*, Bands, or Liſts.

In Figure XXXIII, and XXX
you have other Ornaments to ſet u
der the *Cornice* of the *Dorick* Ord

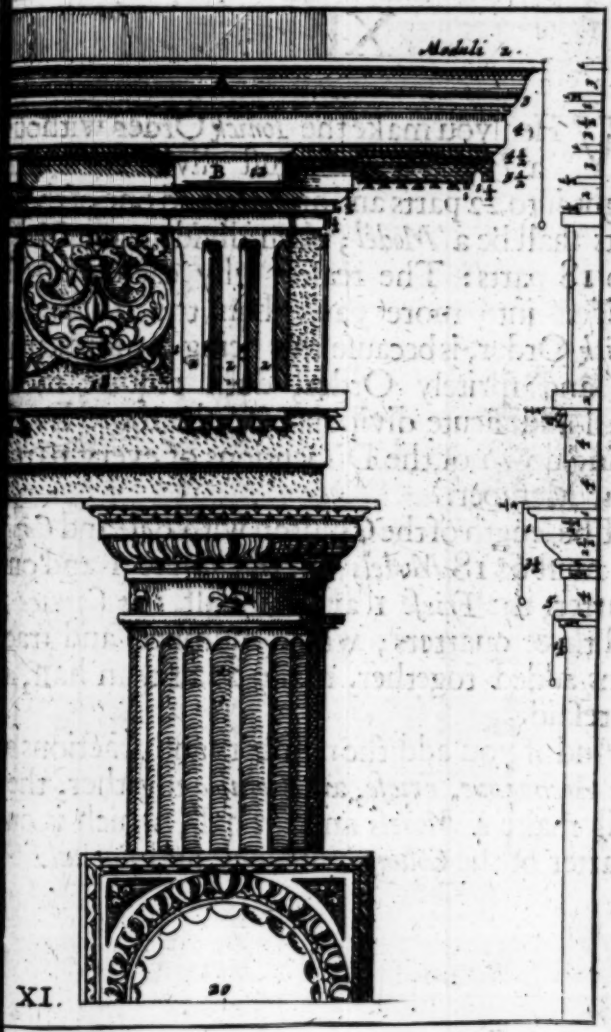



X.

## XI.

THis other piece of the *Do*
*rick* Order is taken from
the remainder of ſome of th
Antiquities of *Rome*, of whic
Work I have ſeen ſuch a comly
Compoſure, that it hath bee
very pleaſant and graceful to be
hold.

A *The* Cola *reverſed, or upright.*
B *The* Modillion (*by which nam*
*all ſuch Members are called, thoug*
*they be ſeverally framed*) *or Un*
*derprop to bear up the* Cornice.
C *The* Bead-ſtring.



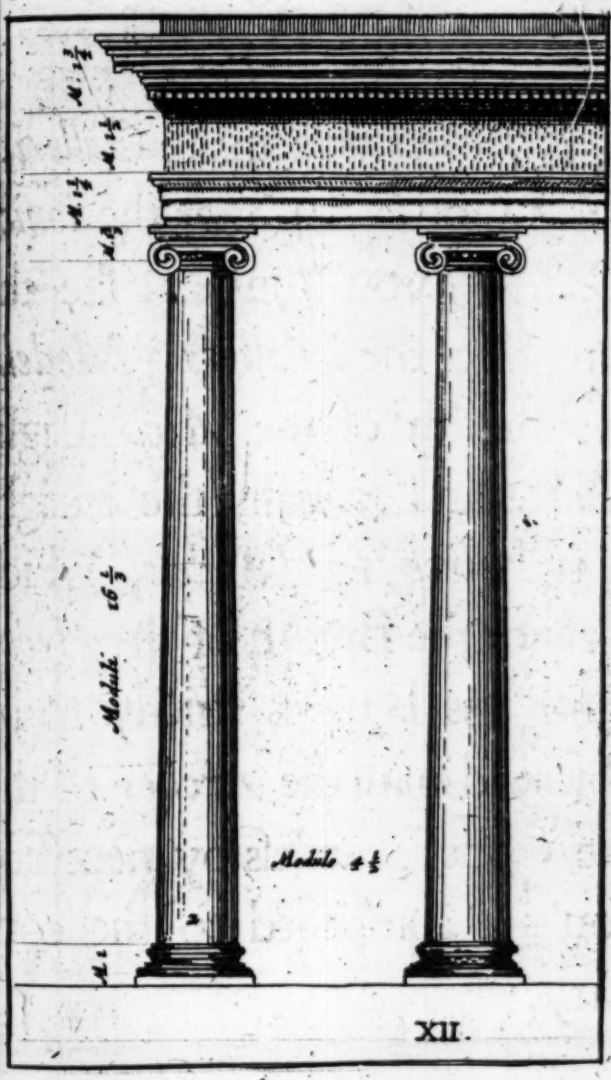

XI.

## XII.

WHen you make the *Ionick* Order witho a *Pedeſtal*, you muſt divide its who height into 22 parts and an half, and one of tho parts ſhall be a *Model*; then divide each *Mod* into 18 parts: The reaſon why each *Model* divided into more parts than the *Tuſcan*, *Dorick* Order, is becauſe this being a more cur ous and ſpritely Order, doth require mo ſmall and acute diviſions for the more Exa ſetting down of the Dimentions of every part cular Member.

The length of the Column with *Baſe* and *Ca tal*, muſt be 18 *Models*, the *Architrave* 1 and o quarter, the *Frieſe* 1 and an half, the *Cornice* and three quarters; which numbers and fra tions added together, make 22 and an half, aforeſaid.

And if you add the numbers and fractions the *Architrave*, *Frieſe*, and *Cornice* together, th will make 4 *Models* and an half, which is o quarter of the *Column* with *Baſe* and *Capital*.




XII.

## XIII.

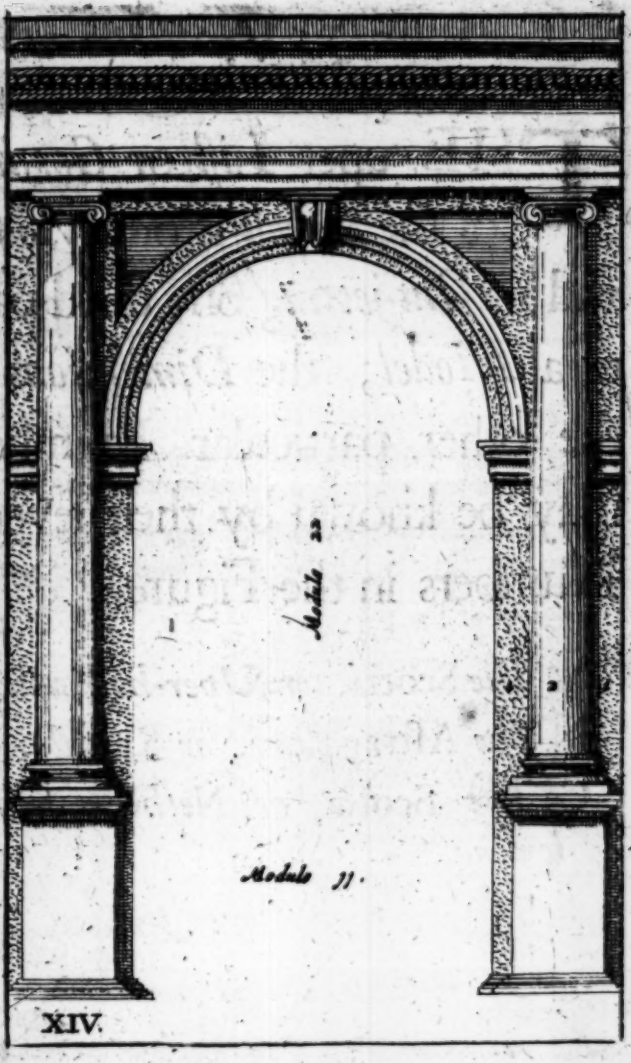
WHen you make *Galleries* or *Lodges* after the *Ionic* Order, you muſt make the Bredth of the *Pilaſters* 3 *Models*, the Bredth of the *Arch* Eight *Models* and an half, the Height of the *Arch* 17 *Models*, which is twice the Bredth of the *Arch*. And this Rule is ſtrictly to be obſerved in all the *Arches* of the like Order, unleſs by neceſſity you are compelled to the contrary.


Module 17.
Module 8½
XIII.

XIV.

NOw when you make *Galleries* or *Lodges* after the *Ionick* Order with *Pedeſtals*, you muſt divide the whole Height into 28 parts and an half, and allow for the height of the *Pedeſtal* with its Ornaments 6 *Models*, which is one Third part of the height of the *Column* with its *Baſe* and *Capital*, which (as was ſaid before) ought to be obſerved in all the Orders.

The bredth of the *Arch* ſhall be 11 *Models*, the Height 22 *Models*, and the Bredth of the *Pilaſters* ſhall be 4 *Models*; as you may ſee in the Figure.




XIV.

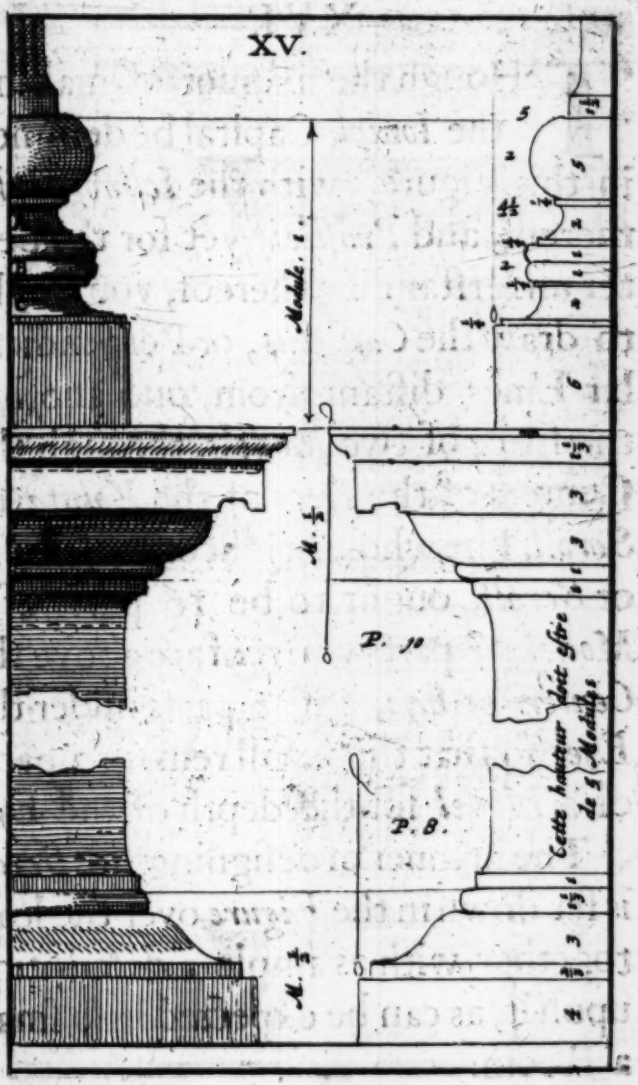
## XV.

THE uper *Liſt* or *Cornice* of the *Impoſt* is one *Model*, and its *Out-jetting* one third part of a *Model*; the *Dimenſions* of the other particular Members may be known by their ſeveral Numbers in the Figure.

A *The* Scotia, *or Uper-hollowing.*

B *The* Aſtragaloes, *or Rounds.*

C *The* Scotia, *or Nethermoſt-hollowing.*


XV.
Module. 1.
M. 1/2
P. 10
P. 8.
M. 1/2
Cette hauteur doit estre de 5 Modules

## XVI.

THough the manner of making the *Ionick* Capital be deſigned in this Figure, with the *Ichnography* thereof, and *Profile*; yet for the better underſtanding thereof, you ought to draw the *Cathetus*, or Perpendicular Lines diſtant from one another the ſpace of two *Models*, through the Centers of the Eyes of the *Voluta* or *Scroll*. The whole height of the *Voluta*, or *Scroll*, ought to be 16 parts of a *Model*, 8 parts whereof are above the *Center*, or *Eye*, and 6 parts under the *Eye*, ſo that there will remain 2 parts of a *Model* for the depth of the *Eye*.

The manner of deſigning this *Scroll* is ſet down in the *Figure* over the leaf, together with as ample a deſcription upon it, as can be expected in ſo ſmall a Room.




XVI

## XVII.

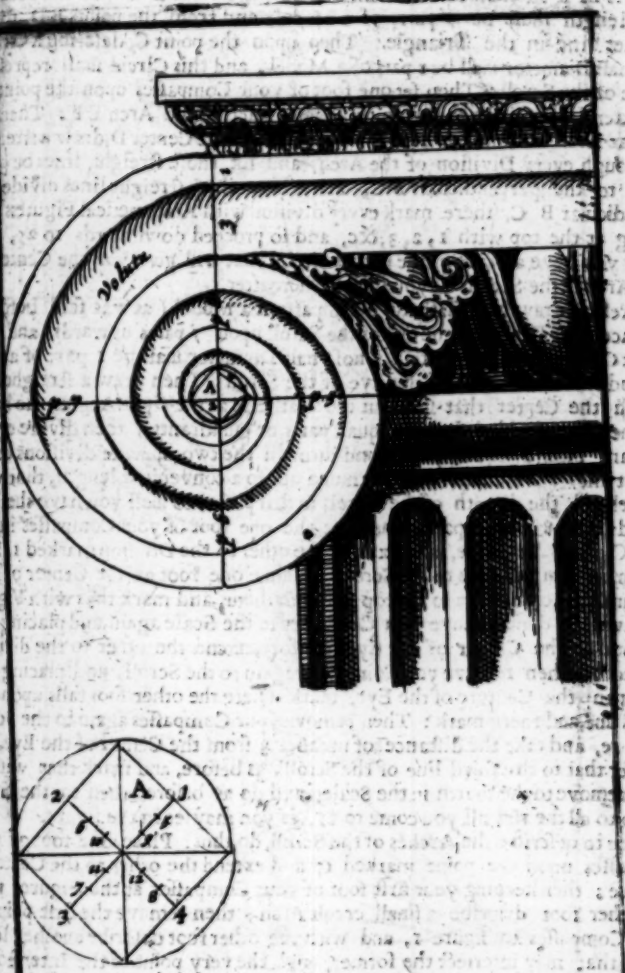
## *The manner of making the* Voluta *or Scroll.*

FIrſt, Draw a Cathetus, whoſe length muſt be 16 parts of a Model, and upon the 7th part upwards, make the Center of the eye of the Scroll, and upon that Center deſcribe a Circle, whoſe half Diameter ſhall be 1 part, and the Circle ſhall be the eye of the Scroll, then through the Center of the Eye draw a ſtraight line, that ſhall both cut the Cathetus at right Angles, and divide the Circle into 4 equal parts; then from the points of Interſection of the ſtraight Lines with the Circle, deſcribe a Square within the Eye, and every ſide of this ſquare divide into two equal parts, and from each Diviſion to its Oppoſite, draw ſtraight Lines; then divide each of theſe Lines from the Center into 3 equal parts, and with Figures mark every point of Diviſion (as in the Draft) with 1, 2, 3, &c. and from this ground-worke you may with great eaſe deſcribe the whole Scroll, as followeth.

1 Firſt place one foot of your Compaſſes upon the ſide of the Square, at the point 1, and extend the other to the top of the Cathetus, and from thence deſcribe a Quadrant, which will reach from the top of the Cathetus aforeſaid, to the ſtraight line that is perpendicular to the Cathetus: then remove the one foot of your Compaſſes to figure 2, and bring the other foot to the ending of the former Quadrant, and from thence deſcribe another Quadrant, which ſhall end at the bottom of the Cathetus: then move your Compaſſes again, and place one foot at Figure 3, and the other foot where the ſecond Quadrant ended, and from thence deſcribe another Quadrant: then move your Compaſſes to Figure 4, and where your laſt Quadrant ended, deſcribe another; then move one foot of your Compaſſes into the point of Diviſion marked with Figure 5, and fit the other Foot to the place where your laſt Quadrant ended, and from thence deſcribe another Quadrant; from thence move to 6, and deſcribe another Quadrant; then to 7; then to 8, &c.

## *To make the Thickneſs of the Liſt of the Scroll.*

THe thickneſs of the Liſt muſt be one quarter of the ſpace of the ſhorteſt diſtance between the two edges in the Scroll; therefore when you draw a liſt about it, you muſt divide the ſpace between every one of the 12 Centers, into 4 equal parts, and place one Foot of your Compaſſes upon the diviſion that falls next to the Centre of that Arch whoſe Liſt you mean to draw, and with the other Foot you may deſcribe the Arch that ſhall be the bounds of the Liſt of the Scroll in that place. Do the like in all the reſt, and your Scroll and Liſt about it will be finiſhed.




XVII.

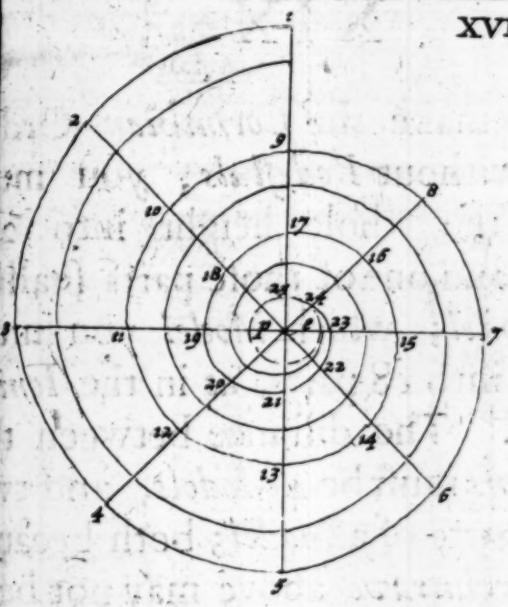
## XVIII. *A Second way to make the* Voluta.

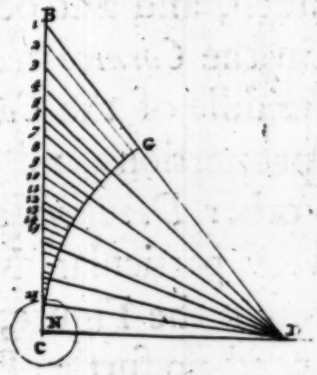
Describe the Triangle B C D after this manner. Let the side C D b
parts of a Model, then let fall the perpendicular B C upon the poi
whose length must be 9 parts of a Model, and from the point B D, d
the other line in the Triangle. Then upon the point C, describe a Ci
whose half Diameter shall be 1 part of a Model, and this Circle shall repre
the Eye of the Scroll: Then set one foot of your Compasses upon the poin
and extend the other to the point C, and describe the Arch E F: Then
vide that Arch E F into 24 equall parts, and from the Center D, draw a stre
line through every Division of the Arch, and let those streight lines be p
longed to the perpendicular B C, and where those streight lines divide
perpendicular B C, there mark every division with Arithmetical Figures
ginning at the top with 1, 2, 3, &c, and so proceed downwards to 25,
so shall you have a Scale of the perpendicular that will give you the Cente
every Arch in the Scroll, as you shall see hereafter.

Therefore draw your Cathetus of 16 parts of a Model, (as was said befo
and place your Center of the eye of the Scroll upon 7 parts upwards, and
on that Center describe a Circle, whose half Diameter shall be 1 part of a M
del, and this Circle shall be the Eye of the Scroll: Then draw a streight l
through the Center that shall cut the Cathetus at the right Angles: so h
you the Eye divided into 4 equall parts or Quadrants; then divide ev
Quadrant into 2 equall parts, and through the two opposite divisions dr
streight lines (which must be continued out to a convenient length, that
comprehend the breadth of the Scroll in that place) so shall you have the
divided into 8 equall parts. Then set the one foot of your Compasses in
point C of the Triangle, and extend the other to the Division marked 1;
so transfer that distance to the Scroll, placing one foot at the Center of
Eye, and the other foot to the top of the Cathetus, and mark that with Fig
1; having so done, remove your Compasses to the Scale again, and placing
one foot in the Center of the Eye, as before, extend the other to the divi
marked 2; then remove your Compasses again to the Scroll, and placing
foot upon the Centure of the Eye, mark where the other foot falls upon
second line, and there mark: Then remove your Compasses again to the Sc
as before, and take the distance of number 3 from the Center of the Eye,
transfer that to the third line of the Scroll, as before, and mark that wit
Then remove to the fourth in the Scale, and do as before, then to the fi
and so to all the rest till you come to 25, as you may see in the figure.

Then to describe the Arches of the Scroll, do thus: Place one foot of y
Compasses upon the point marked 1, and extend the other to the Cente
the Eye; then keeping your first foot of your Compasses at the Figure, w
the other foot describe a small occult Arch; then remove the first poin
your Compasses to figure 1, and with the other foot describe another sm
Arch, that may intersect the former, and the very point of the Intersecti
shall be the Center of the Arch 1, 2. Then setting the one foot of your Co
passes to figure 2, upon the second line of the Scroll, extend the other to
Center of the Eye, and your Compasses being at that distance, describe a
ther small Arch through the Center of the Eye of the Scroll: Then rem
the first point of your Compasses to the point 3, upon the third line, and w
the second foot describe another small Arch, that shall cut the former A
and the very point of Intersection shall be the Center of the Arch 2, 3, as
may see in the Figure. Do the like with all the other Figures, till the w
Scroll is finished.

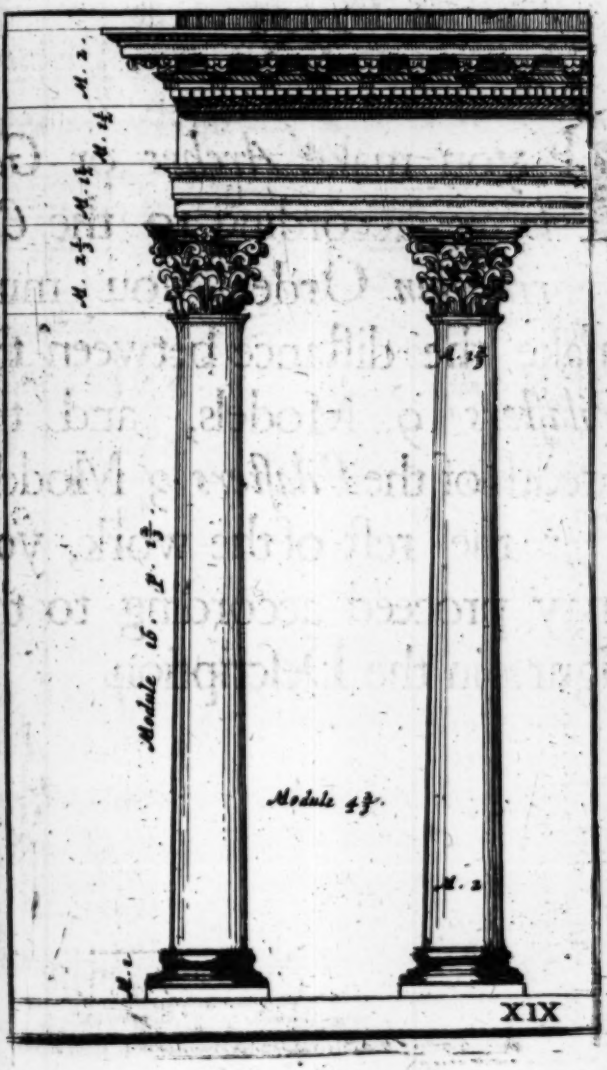
XVIII.





# XIX

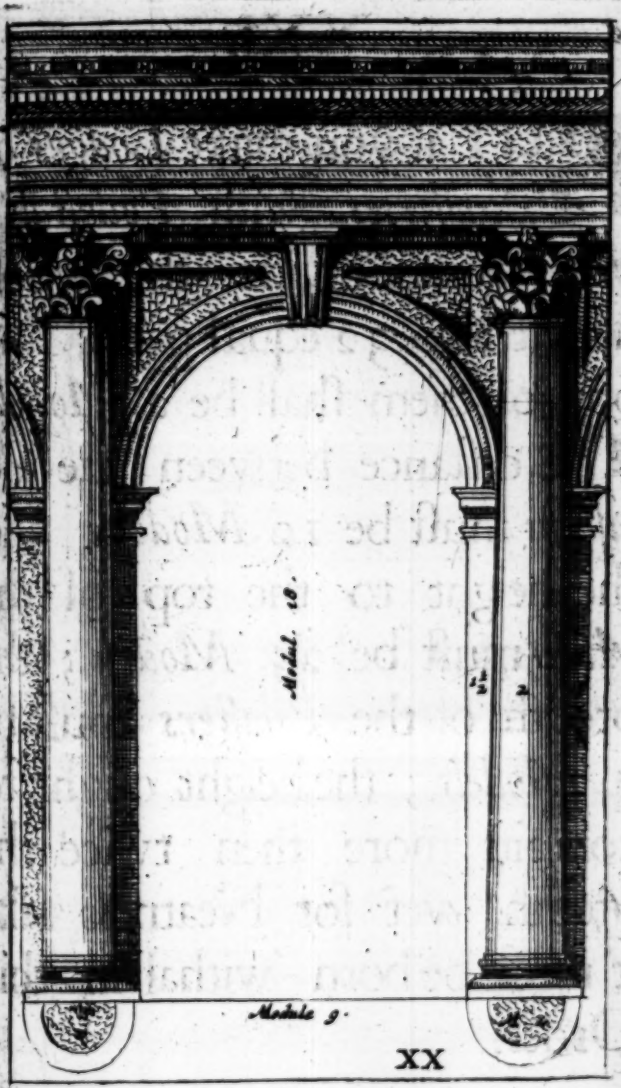
TO make the *Corinthian* Orde without *Pedeſtals*, you mu divide the whole height into 2 parts, and one of thoſe parts ſhall the *Model*; which *Model* you mu divide into 18 parts, as in the *Ioni* Order. The diſtance between t *Collumns* muſt be 4 *Models*, and tw third parts of a *Model*; both becau the *Architrave* above may not be toomuch, and alſo becauſe the *M dels* in the *Cornice* may be juſt ov the middle of the *Collumn*, in the due proportions and proper place The other *Diviſions* and *Dimenſio* of every particular Member, ma be ſeen in the Figure, and therefo will need no further Explanation.




XIX

## XX.

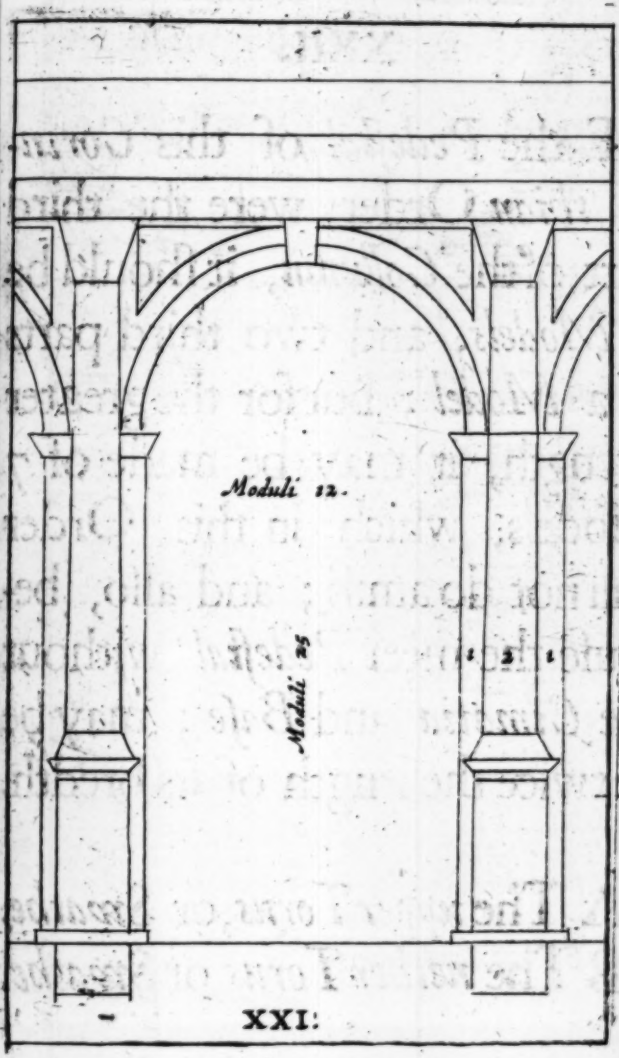
IF you make *Arches* or *Galleries* according to the *Corinthian* Order, you must make the diſtance between the *Pilaſters* 9 Models, and the bredth of the *Pilaſters* 3 Models. For the reſt of the work, you may proceed according to the figures in the Deſcription.




XX

## XXI.

BUT if you make *Lodges* o *Galleries* with *Pedeſtals* you muſt divide the whol height into 32 equal parts, an one of them ſhall be a *Model* The diſtance between the *P laſters* muſt be 12 *Models*; an the height to the top of th *Arch* muſt be 25 *Models*; th bredth of the *Pilaſters* muſt b 4 *Models*; the height ought t contain more then twice th bredth, yet for Neatneſs ſak it muſt be born withal in thi Order.



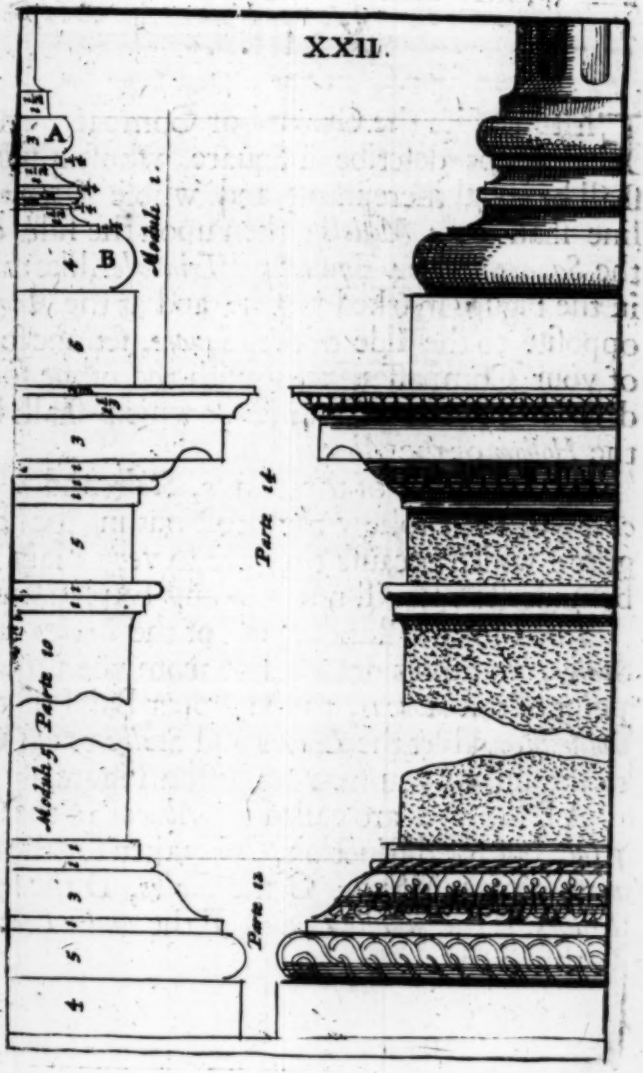

XXI.

## XXII.

IF the *Pedeſtal* of this *Corinthian* Order were the third part of the *Collumn*, it ſhould be 6 *Models*, and two third parts of a *Model*; but for the greater ſtrength, it may be made of 7 Models, which in this Order will not do amiſs; and alſo, becauſe the meer *Pedeſtal* without the *Cimatia* and *Baſe*; may be be twice the length of its bredth

A The *upper Torus*, or *Swathe*
B The *nether Torus*, or *Swathe*

XXII.



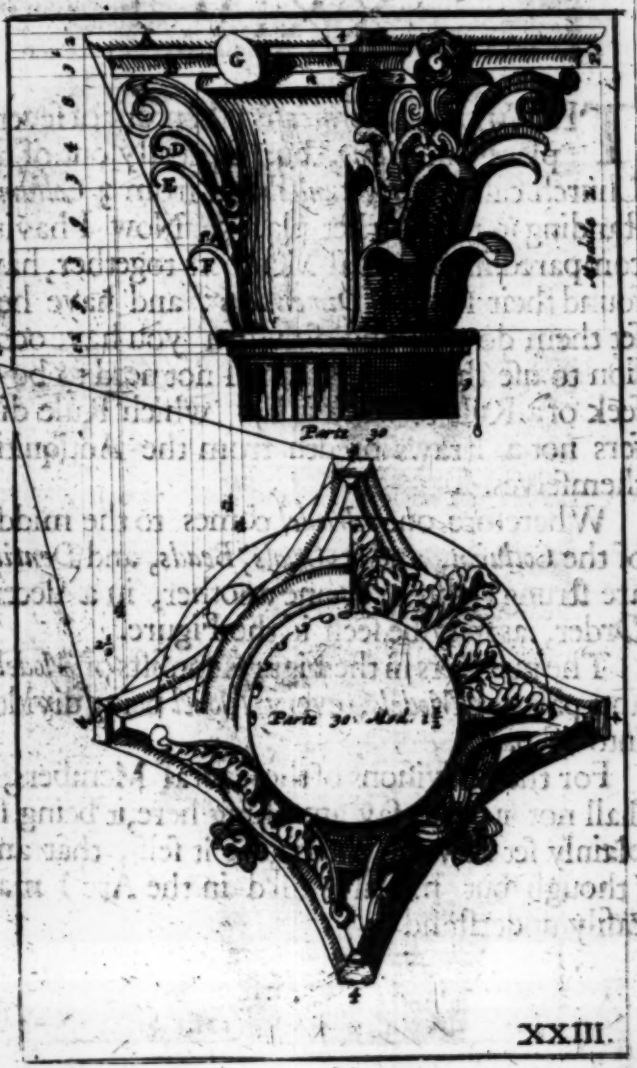
## XXIII.

FIrſt meaſure the Ground or Compaſs, and upon it deſcribe a Square, whoſe 4 ſides ſhall be equal thereunto, and whoſe *Diagonal* line ſhall be 4 *Models*; then upon the ſides of the *Square* make 4 *Equilateral Triangles*, like that in the Figure marked † thus: and at the *Angle* oppoſite to the ſide of the *Square*, ſet one foot of your Compaſſes, and with the other foot deſcribe an *Arch* of a *Circle*, which ſhall be the *Hollow* of the *Abacus*.

For the height of the *Leaves*, *Stalks* and *Abacus*, you muſt follow the directions in the Figure; which becauſe they are ſo very plain to be underſtood, will not need any Explanation.

Then for the ſtanding out of the *Leaves* and *Stalks*, you muſt draw a line from the utmoſt point of the *Abacus*, to the upper Band of the *Collumn*, and let the *Leaves* and *Stalks* reach juſt to the line as you may ſee in the Figure.

A B together are called the *Abacus* of the *Capital*, but for diſtinction, A is taken for the *Cimatium* of the *Abacus*, C the *Stalks*, D the *leſſer Leaves*, E the *middle Leaves*, F the *under Leaves*, G the *Flower*.




XXIII.

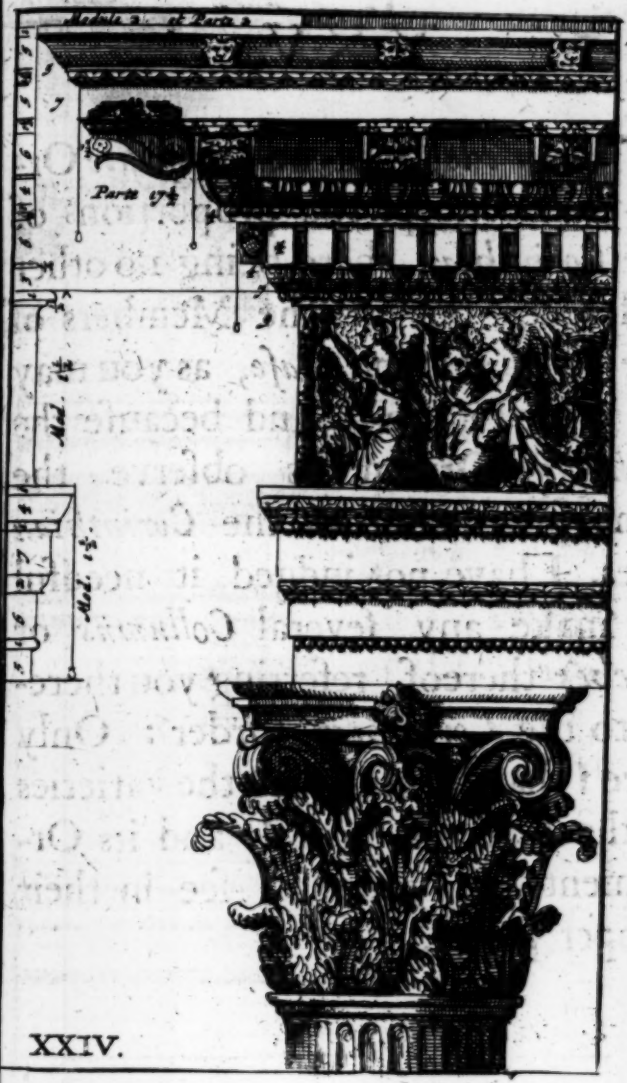
# XXIV.

THe *Corinthian Cornice* is taken out of several places in *Rome*, but especialy out of the Church called *La Rotunda*, and from 3 *Collumns* standing in the Market place. Now I having compared its principal Members together, have found their several *Dimensions*, and have here set them down; and so when you have occasion to use the like, you shall not need to be to seek of a Rule to work it by, which Rule differs not a straws bredth from the Antiquities themselves.

Wherefore one *Model* comes to the middle of the *Collumn*, and its *Ovals*, *Beads*, and *Dentils*, are strung right over one another, in a decent Order, as may be seen in the Figure.

The numbers in the Figures consists of *Models*, and parts of *Models*, every *Model* being divided into 18 parts.

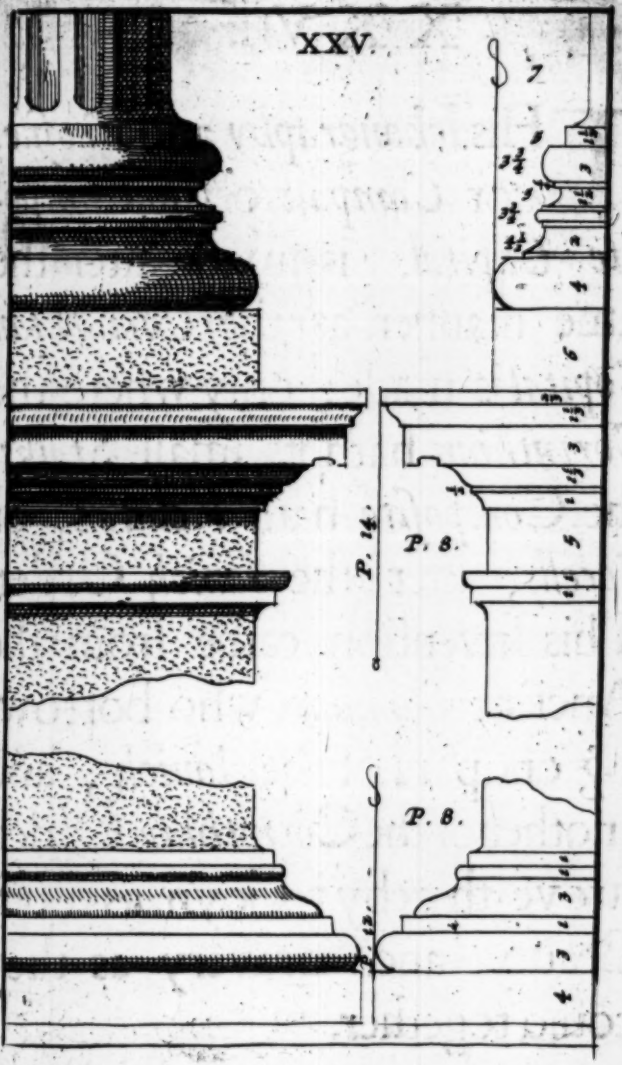
For the Divisions of the several Members, I shall not need to say any thing here, it being so plainly set down in the Figure it self, that any (though but meanly skill'd in the Art) may easily understand it.




XXIV.

## XXV.

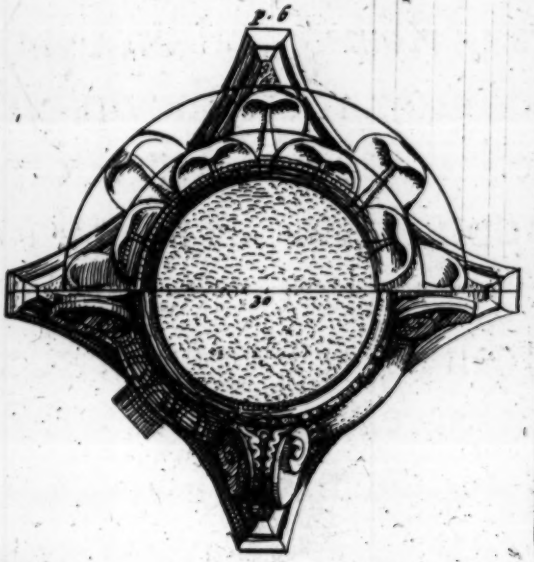
THis *Pedeſtal* of the *Compoſite* Order, keeps the proportions of the *Corinthian*, there being no other difference but in the Members of the *Cimatium* and *Baſe*, as you may ſee in the Figure. And becauſe the *Compoſite* Ornaments obſerve the ſame proportion as the *Corinthian* does, I have not judged it needful to make any ſeveral *Collumns* or *Arches* thereof, referring you therein to the *Corinthian* Order: Only here I have ſhown you the varieties of the *Baſe* and *Capitals* and its Ornaments, as you may ſee in their proper places.


XXV.
P. 14.
P. 8.
P. 8.

## XXVI.

THis *Ichongraphy* and *Profile*, or *Compass* of the *Composite Capital*, is made after the same manner as the *Corinthian Capital* is made: only where the *Corinthian* hath its small *Stalks*, the *Composite* hath *Voluta's*, or *Scrolls*, after the *Ionick* Order. This Invention came from the Ancient *Romans*, who borrowing one part of the *Ionick*, and another of the *Corinthian* Order strove thereby to joyn as much Beauty and Bravery as they could together.

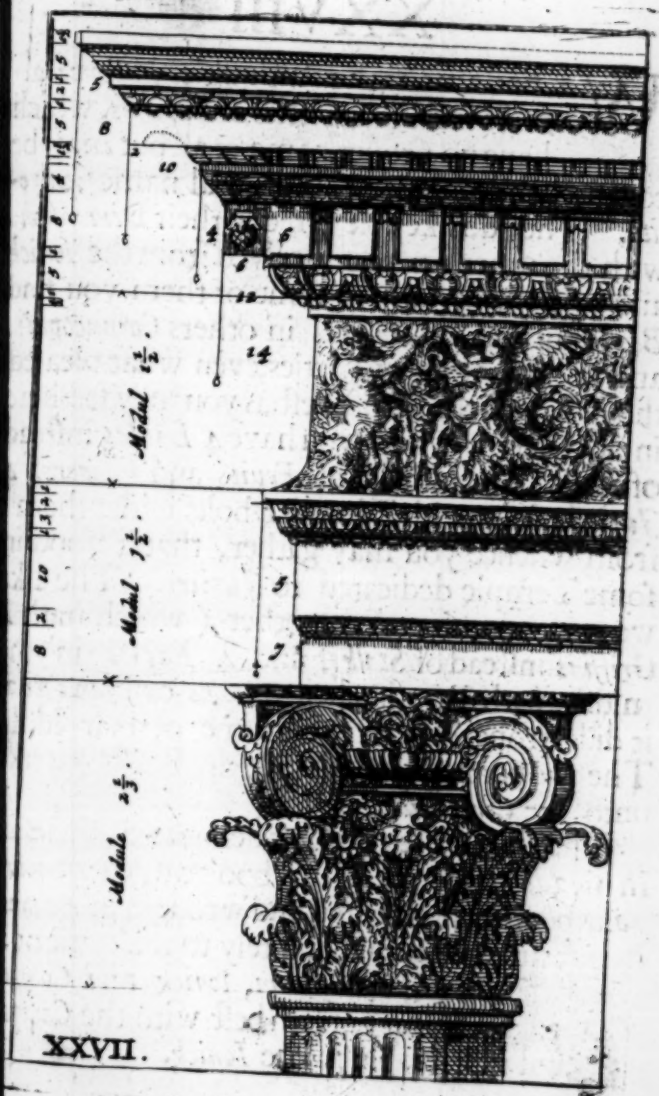



XXVI.

## XXVII.

THis piece of *Compoſite* Or der, namely, the *Capita Architrave, Frieſe,* an *Cornice,* is alſo taken out of ſe veral places among the Antiqui ties of *Rome,* and brought int the Proportion ſhown you i the *Corinthian*; wherefore th Proportion of the ſeveral Mem bers being marked in the Figur I ſhall omit ſpeakin of them i this place.




XXVII.

# XXVIII.

WE find among the Antiquities of *Rome* almoſt infinite varieties of *Capitals*, which have no proper name at all but may be comprehended under this general name *Compoſite*. They do likewiſe agree in their *Demenſions* with the other *Compoſite*, derived from the *Ionick* and *Corinthian*; only in ſome of them you find *Beaſts* inſtead of *Stalks*: in others *Cornucopia's*, and in others other varieties, even what pleaſed the Fancy of the Artiſt beſt; as you may ſee here in this Deſign: where you have 4 *Eagles* inſtead of *Stalks* and inſtead of *Fruits* and *Flowers*, *Jupiters* faces, with Thunder-bolts under them from whence you may gather, that it ſtood in ſome Temple dedicated to *Jupiter*. The like we may conceive of the other (which hath *Griffins* inſtead of *Stalks*, and 4 *Eagles* in the midſt, with *Dogs* in their *Tallons* or *Claws*) that it did properly belong to ſome of their Idols. The proportions (excepting the Beaſts) is like unto the *Corinthian Capitals*.

The *Baſe* (which is at laſt delineated) *Vetruvius* in his 3*d*. chapter of his 3*d*. book calleth *Atticurga*, as being firſt invented and wrought in *Athens*. In our times we uſe indefinitely to make uſe of it under the *Dorick*, *Corinthian*, *Ionick* and *Compoſite* Order; but it agreeth beſt with the *Compoſite*, and is tolerable in the *Ionick*.




XXVIII.

## XXIX.

THere are divers ways to leſſen Collumns, whereof I have he and in the following page ſet down thoſe two which are mo eſteemed of.

The firſt and beſt is this, After you know the height and thic neſs of the Column, you muſt divide the Cathetus thereof in 3 equal parts, and in the point of the firſt diviſion upwards, dr a thwart line through the Column, that ſhall cut the Cathetus right Angles, then in the point of Interſection, ſet one foot of yo Compaſſes, and extend the other foot to one of the ſides of t Column, or to half the bredth, which is all one, and ſo deſcribe Semi-circle upon the thwart line, then divide half that Semi-circ into ſo many parts as you pleaſe, as into 6, 9, 12, 15, or mo and note that into ſo many parts as you divide the Semi-circle, many equal parts you muſt divide the two upper thirds of t Cathetus into, and upon every Diviſion draw ſtraight Lines throu the Column, that ſhall cut the Cathetus at right Angles; th from every point of Diviſion in the Semi-circle, draw ſtraight li parallel to the Cathetus, and where theſe ſtraight lines interſect t lines drawn athwart the Column, there ſhall be the ſeveral poi that you muſt leſſen the Column into, in every particular pla But you muſt take notice, that the Line drawn from the firſt po of Diviſion in the Semi-circle, muſt interſect the line drawn fr the firſt Diviſion in the Cathetus; and the ſecond in the Semi-circ the line drawn from the ſecond in the Cathetus; the third in t Semi-circle, from the third in the Cathetus, and ſo forth; ev line drawn from the ſeveral points of Diviſion in the Semi-circ muſt interſect the line drawn from the ſame number of Diviſi in the Cathetus.

Having thus drawn one ſide of the Column, you may by t ſame Rules draw the other ſide alſo, or elſe meaſuring with y Compaſſes the diſtance of every point of leſſening from the C thetus, you need but turn your Compaſſes about upon the po that ſtands in the Cathetus, and ſo transfer the diſtance to t other ſide of the Column.

This kind of leſſening may be uſed in the Tuſcan and Dor Order, which Orders are not to be leſſened below the netherm third part of the Column.

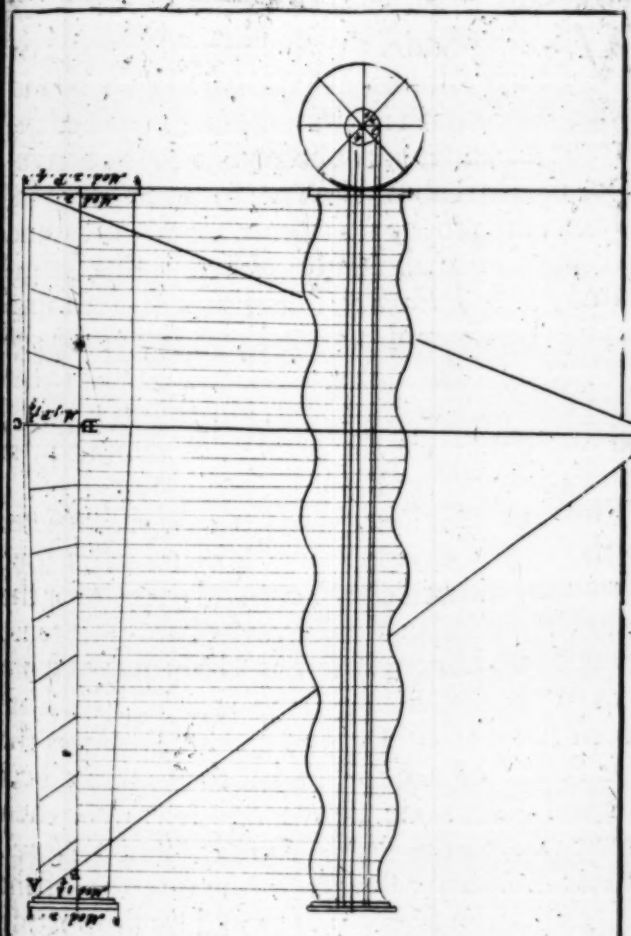



XXIX

THis ſecond way of leſſening Collums, our Author found out by his own ſtudy and Invention, and though it be not very common, yet it is eaſie enough to be underſtood by the Figure: Wherefore in the firſt place on muſt divide the whole Cathetus into 3 equal parts, and through the firſt point of Diviſion (counting upwards) you muſt draw a thwart line, as C D that ſhall cut the Cathetus at right Angels, which line muſt be continued to a convenient length, as to E, that ſo it may be interſected by the line drawn from the Diviſions in the Cathetus, as you ſhall learn hereafter: then divide each of them three equal parts into four equal parts more, and if you intend to have your Collum wreathed, divide every one of thoſe four parts, into four equal parts more: ſo ſhall your Cathetus be divided into 48 equal parts: Then with your Compaſſes meaſure the length of the line C D, and carry that length to the top of the Collumn, placing one foot of your Compaſſes in the point A, and noting where the other foot falls upon the Cathetus, as in the point B, and through theſe two points draw a ſtraight line, and continue it till it interſect the line C D E, as here it doth in the point E, Then from the point E draw ſtraight lines through every fourth Diviſion in the Cathetus, as in the Figure, or if you pleaſe (for more exactneſs) through every ſingle diviſion in the Cathetus, and continue them to the outſide of the Collumn: Then keeping your Compaſſes to their former diſtance, place one foot upon the point of Interſection of every one of the ſlope line, with the Cathetus and extend the other towards the outſide of the Collumn upon the ſame ſlope line; and where the other foot of your Compaſſes falls, there ſhall be the point of the Collumns leſſening in that place. And note that though the former Collumn was leſſened but from one third part upwards, yet this which erres for other Orders, viz. for the Ionick, Corinthian and Compoſite orders muſt be leſſened from the firſt third part both upwards and downwards, as you may ſee in the Figure; and therefore you muſt as well draw ſlope lines through the Diviſions in the neither part of the Cathetus, as through the upper.

Having thus divided and wrought upright Collumns, if you will have your Collumns wreathed (as thoſe of St. Peters Church at Rome) you muſt draw ſtraight lines through every one of the 48 diviſions in the Cathetus to the outſides of the Collumn, which ſtreight lines muſt be Parellel to the line C D E; then on the Plot or Ground-work, upon the Cathetus, deſcribe a ſmall Circle, and divide it into 8 equal parts, and draw lines through the oppoſite points of diviſions; and upon the ſame Center that you drew this Circle, deſcribe another ſmaller Circle within the former, which by the Lines drawn through the Center, will alſo be divided into the ſame parts that the greater Circle is: Then from the points of Diviſion in the ſmall Circle, draw 4 lines through the Collumn parellel to the Cathetus, and where thoſe lines interſect the thwart lines drawn before, there ſhall be the ſeveral points, through which you muſt carry on a Spiral line a long by the Cathetus, as in the Figure. But you muſt note, that at the four firſt lines at the bottom and top of the Collumn, the Spiral line muſt not touch the outmoſt Parellel line, but muſt run as you ſee in the Figure. Then on the Cathetus muſt you meaſure the thickneſs of the ſtraight Collumn in every Diviſion, and tranſfer that thickneſs to the ſame Diviſion in the wreathed Collumn, placing one foot of your Compaſſes at the interſection of the Spiral line with the Diviſions of the Cathetus and the lines parallel to the Cathetus, and extending the other to the ſides of the wreathed Collumn; and where the other foot of your Compaſſes falls there ſhall be the bounds of the ſides of the wreathed Collumn in that place.

Note, that if you make the little utmoſt Circle biggar, then will the Collumn be more wreathed; if leſs, then will the Collumn be leſs wreathed.



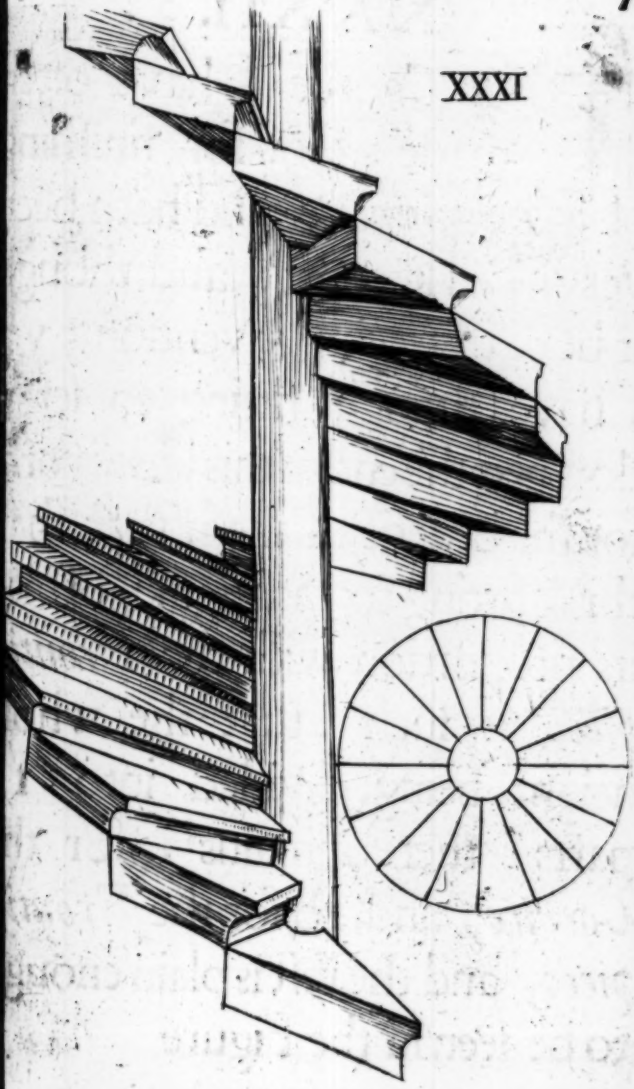
XXX

## XXXI.

WInding Stairs that belong th Steeples, or high Aſcents, are projected on a round *Profile*, which hath its circumference divided into 12 or 16 equal parts, according to the conveniency of the Room you have to place them in, and according to the number of Steps you intend ſhall wind once about the *Newel*. The Semi-Diameter of the *Profile* is ſometimes divided into 6 equal parts, and one of them taken for the *Newel*, ſometimes into 4 parts, and one of them taken for the *Newel*, and ſometimes into 3 parts, and one taken for the *Newel*, according to the convenience of the Room, &c.

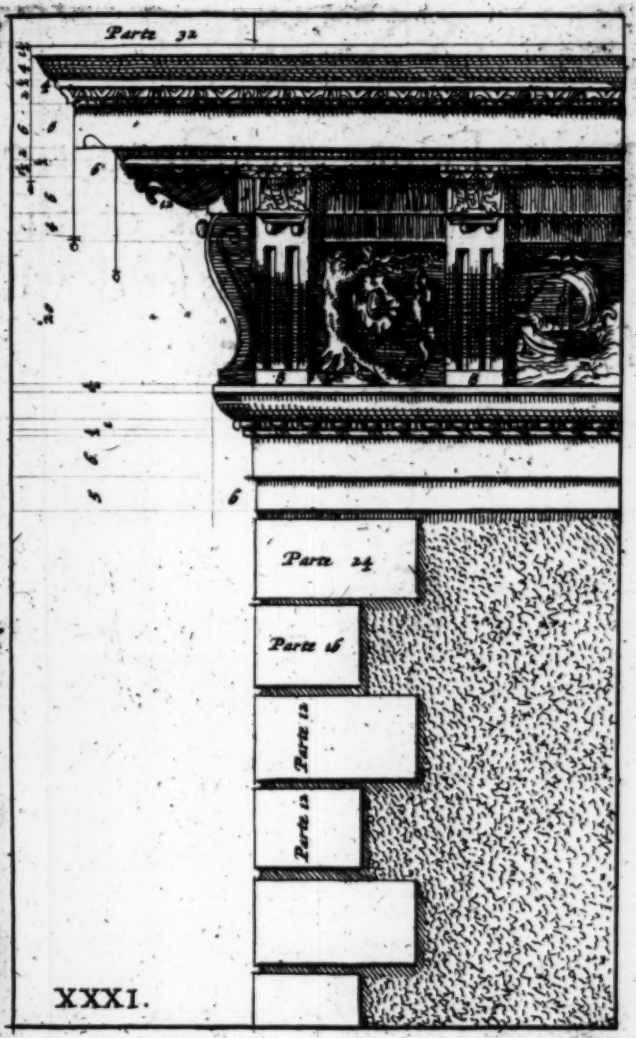
Thus in the Figure you have the Semidiameter of the *Profile*, divided into 4 equal parts, one whereof is allowed the *Newel*, and the reſt for the length of the Steps: You have the Circumference divided into 16 equal parts, and lines drawn from each par to the *Newel*; each ſpace contained between two of thoſe lines on the *Profile*, is the true figure of a Step; and if they were all cut out and placed one above another, over their true place on the *Profile*, round about a *Newel* whoſe Diameter ſhould be one quarter of the length of each Step; you would by ſupporting each Step underneath, already have the *Model* of a true pair of Stairs, as they are laiddown in the Figure.

XXXI



## XXXII.

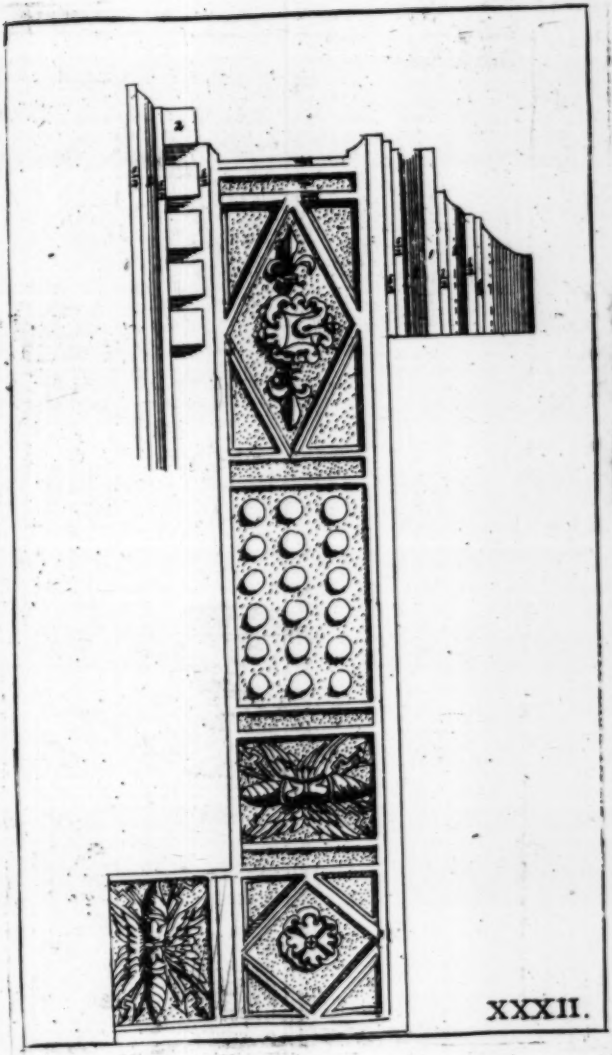
THis *Cornice* I have ofte made uſe of for finiſhin of a *Frontiſpiece*, and hath bee very well liked of: and thoug it be of my own invention, y I have thought fitting to ſet down at the end of this little work for the benefit of them that ſha think fitting to make uſe of it its proportion with the *Fronti piece* is ſuch, that the whol height being divided into 1 parts, there remains 1 for th *Cornice*, and 10 for the *Fronti piece*, and the reſt is plain enoug to be ſeen in the Figure.



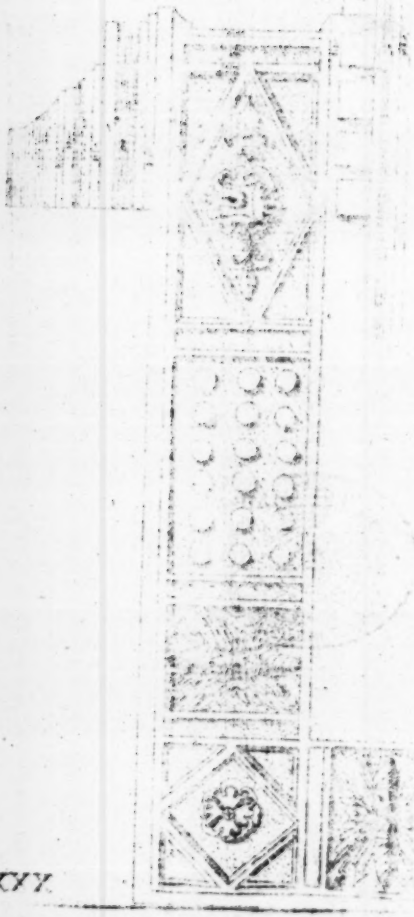

XXXI.

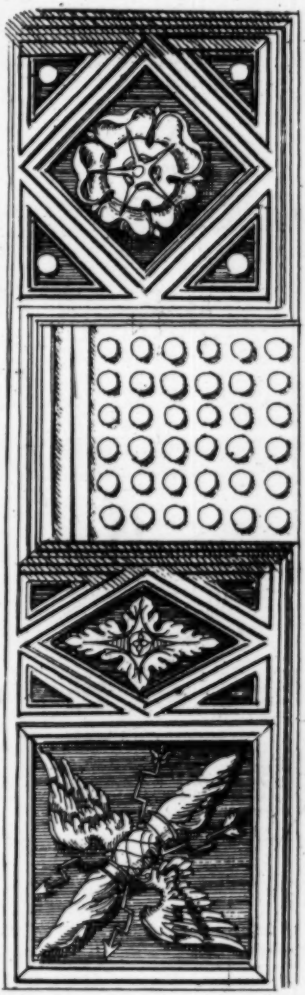
## XXXII.

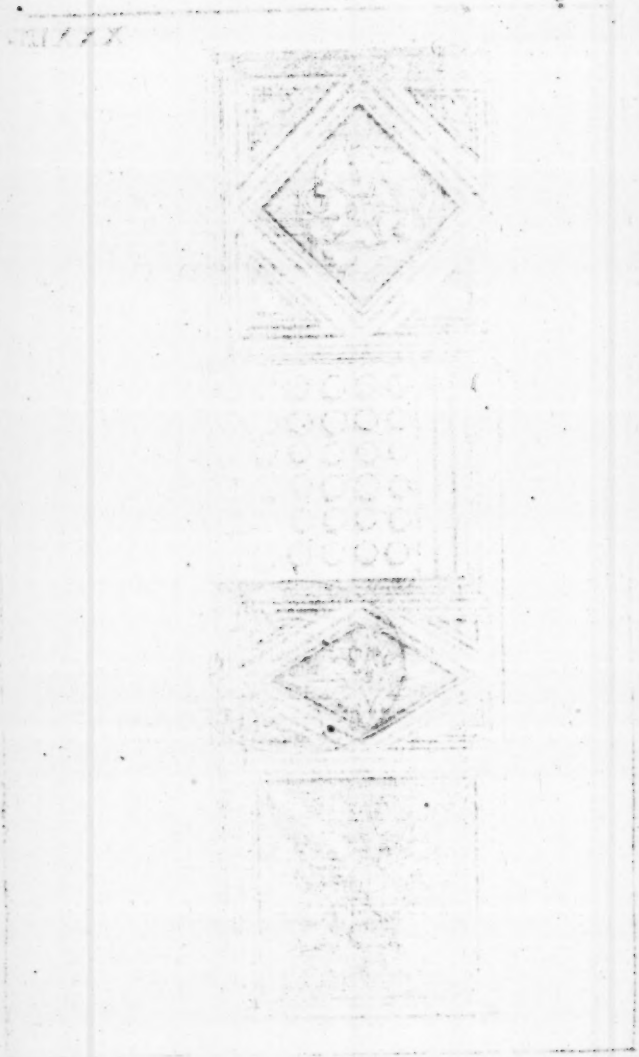
THis Figure and Ornament under the *Cornice* of the *Dorick* Order, is ſet down alſo in the tenth Figure.



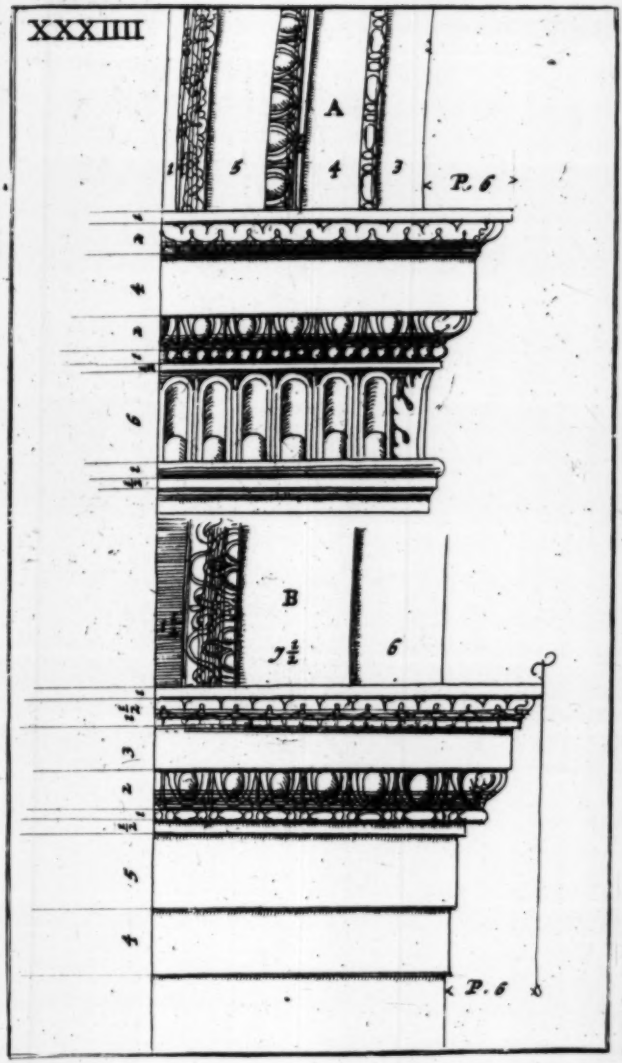
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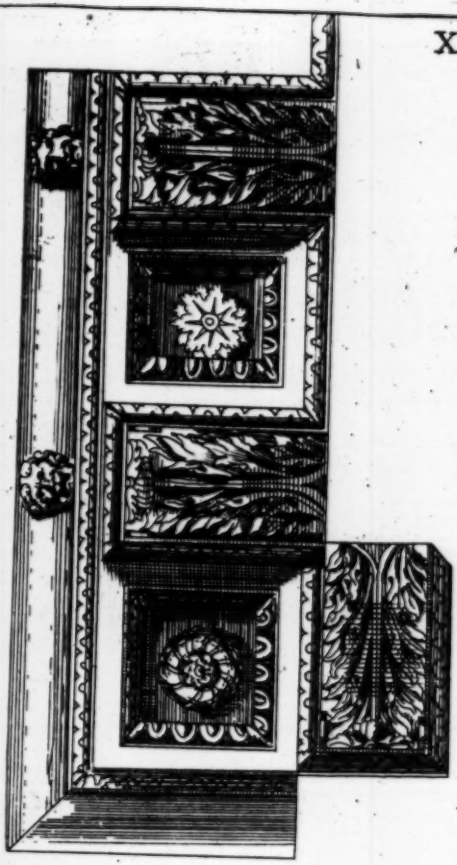




XXXIIII

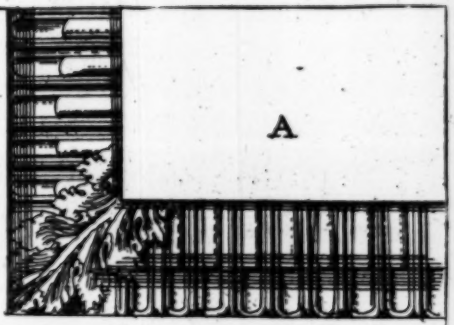


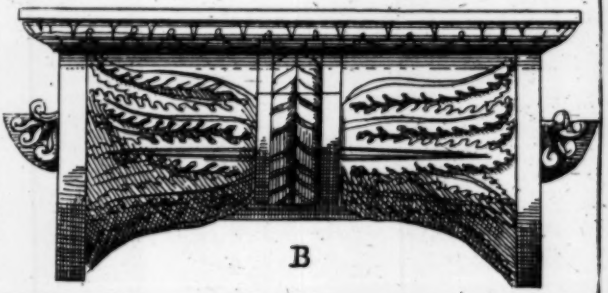
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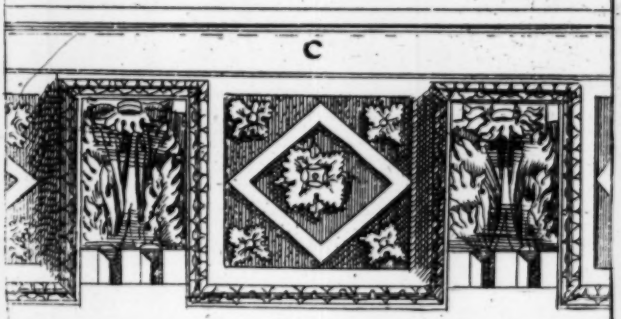


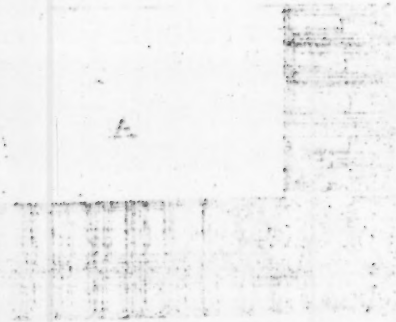


XXXVI.

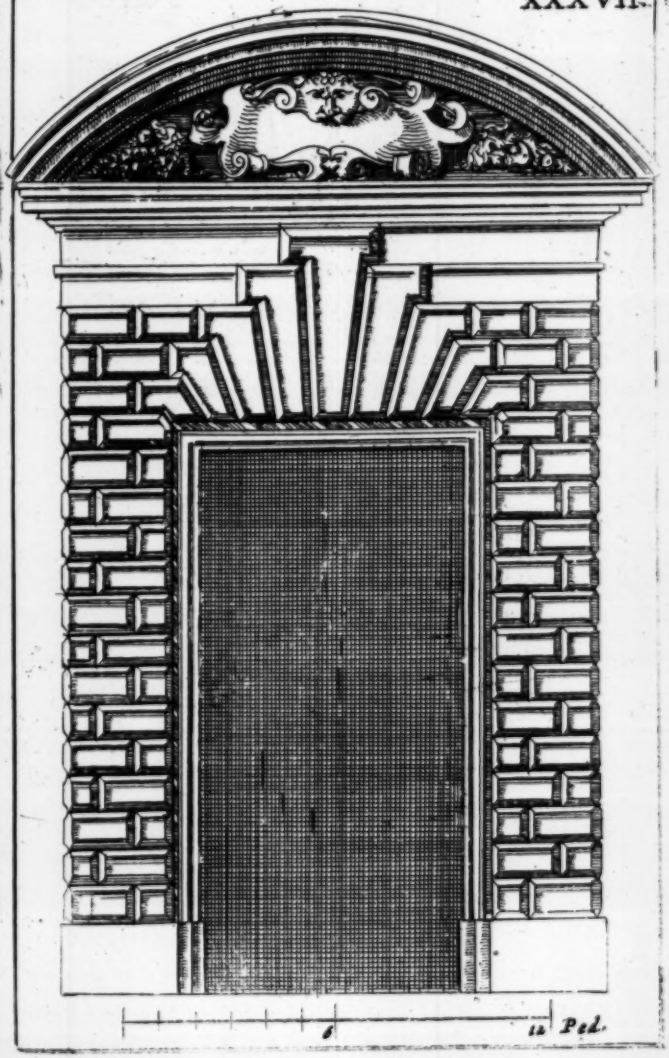


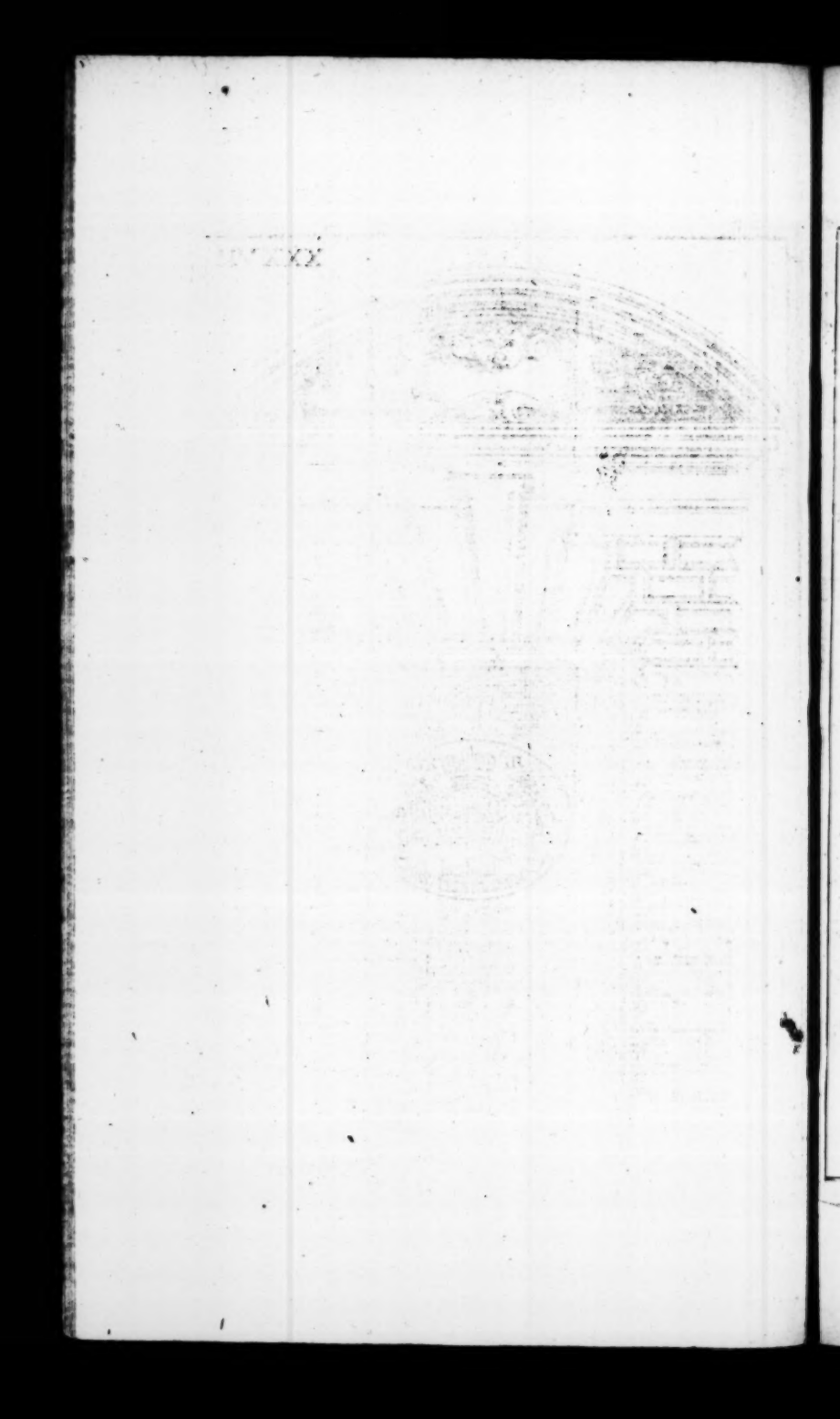



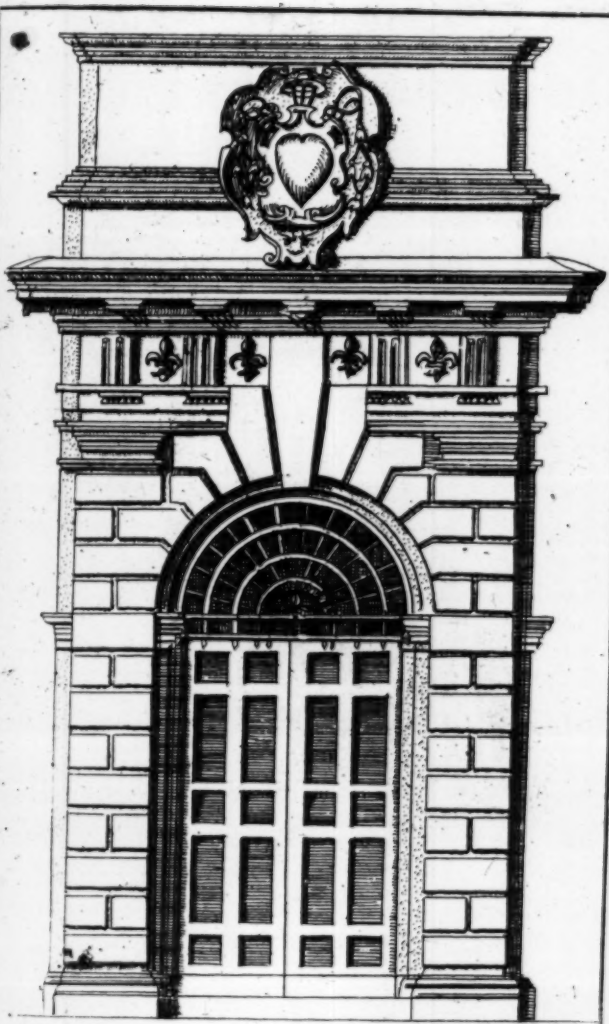





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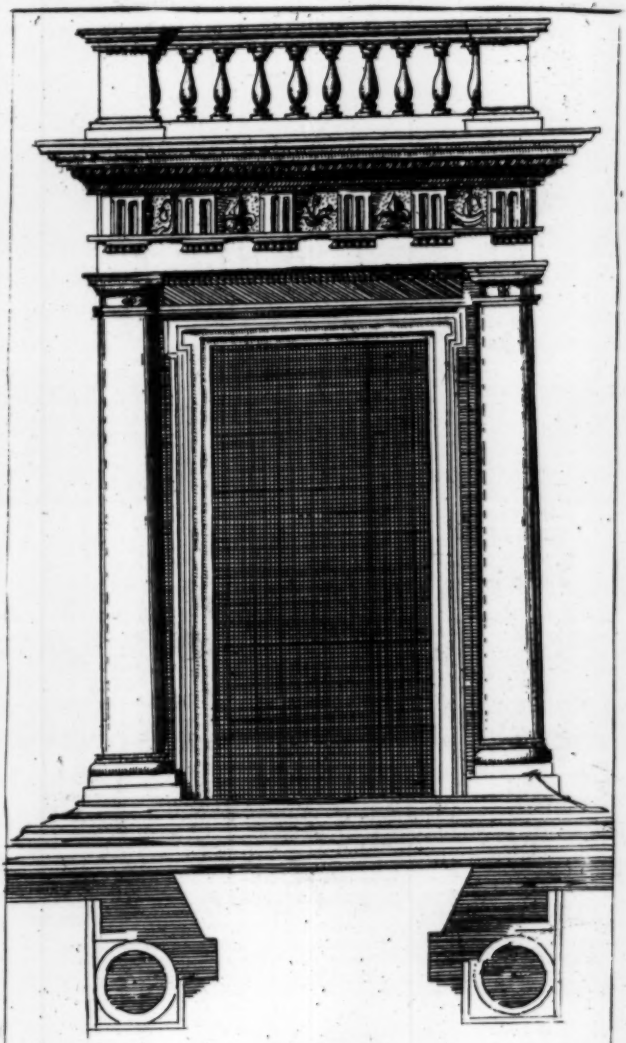




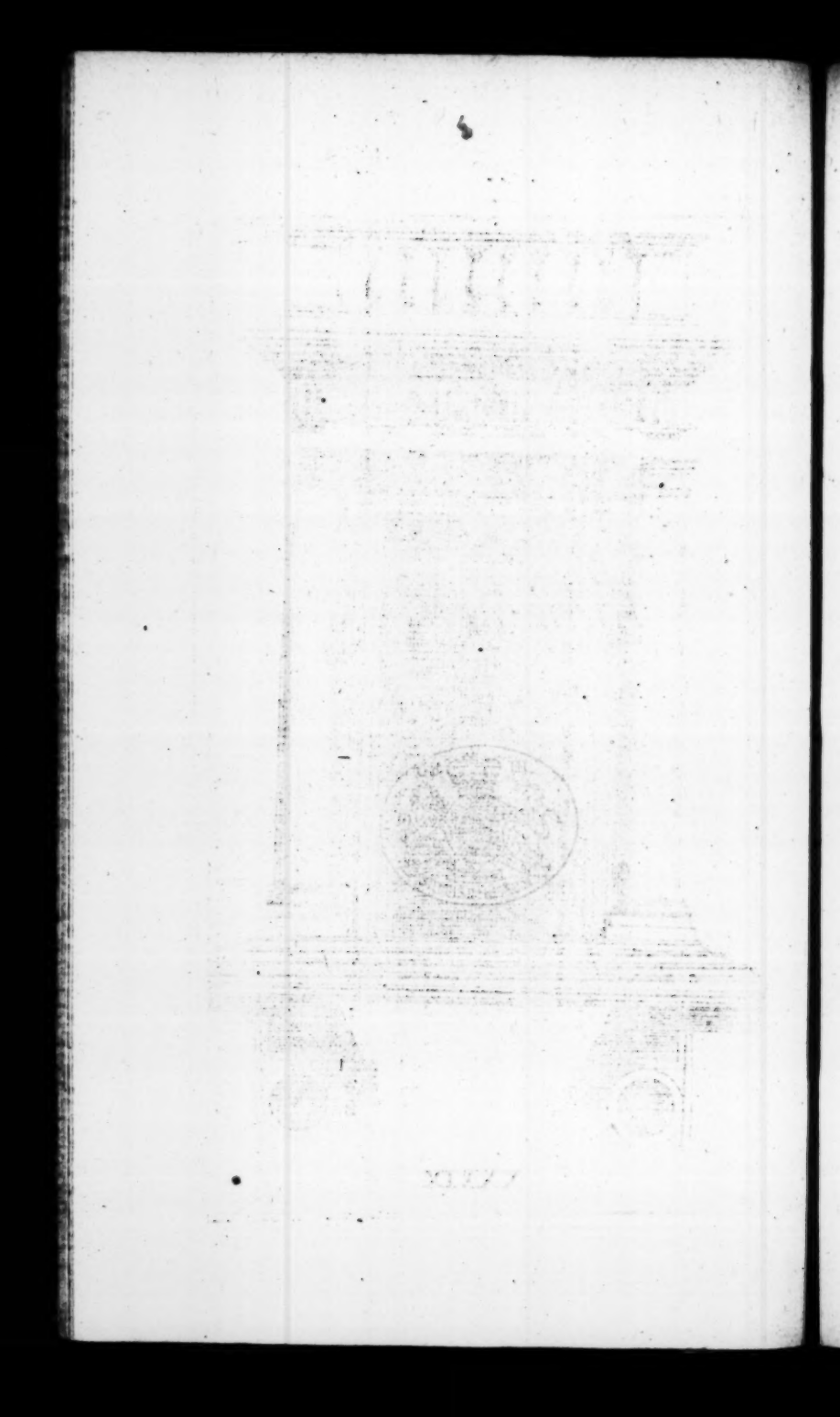


XXXVIII.





XXXIX.





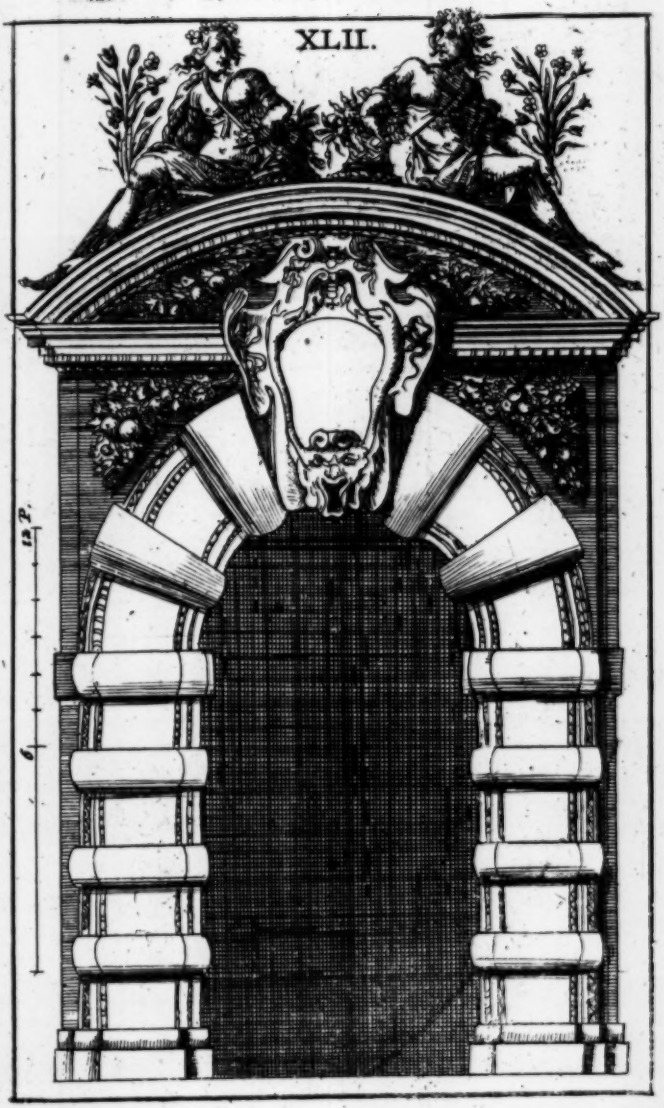
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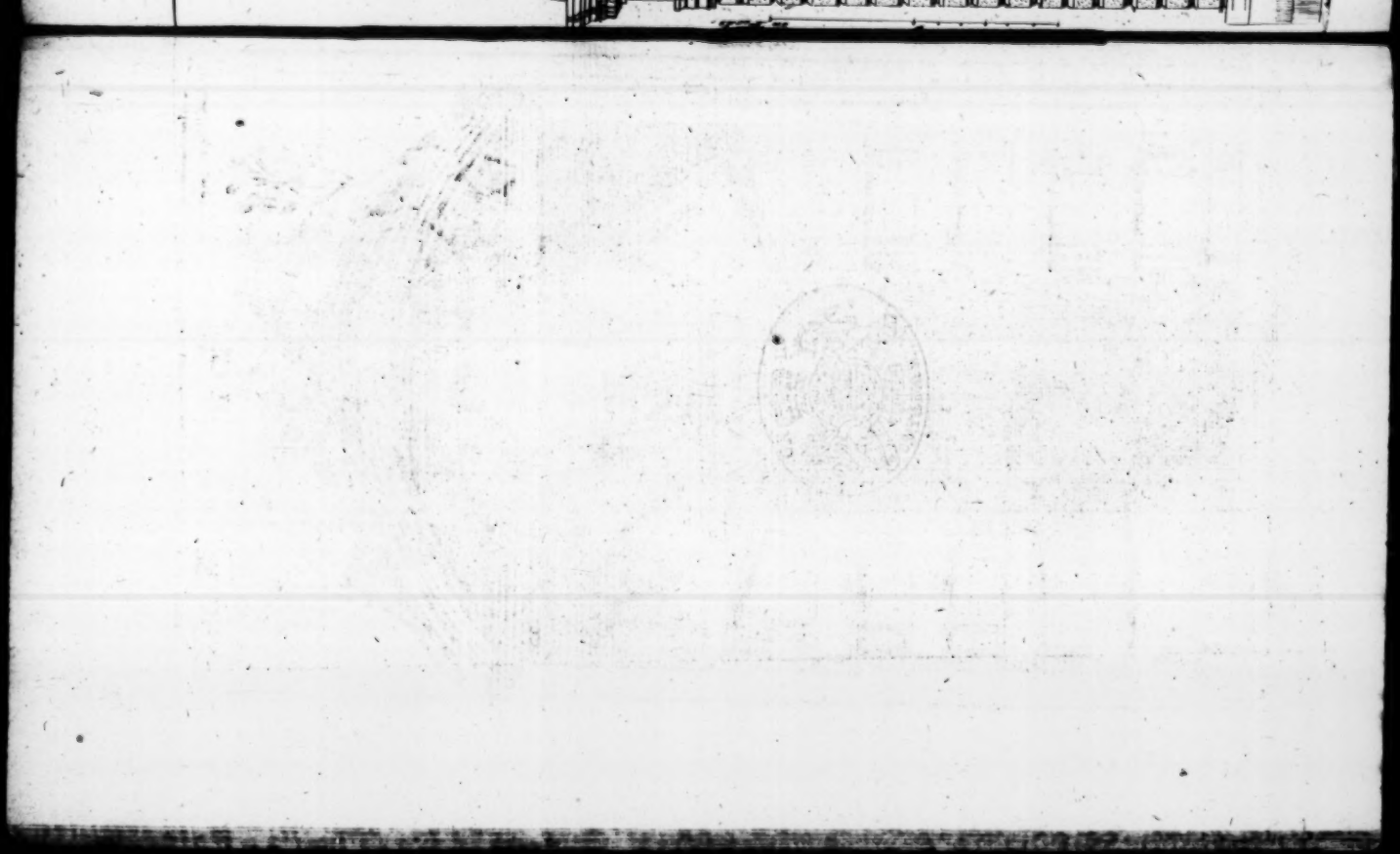


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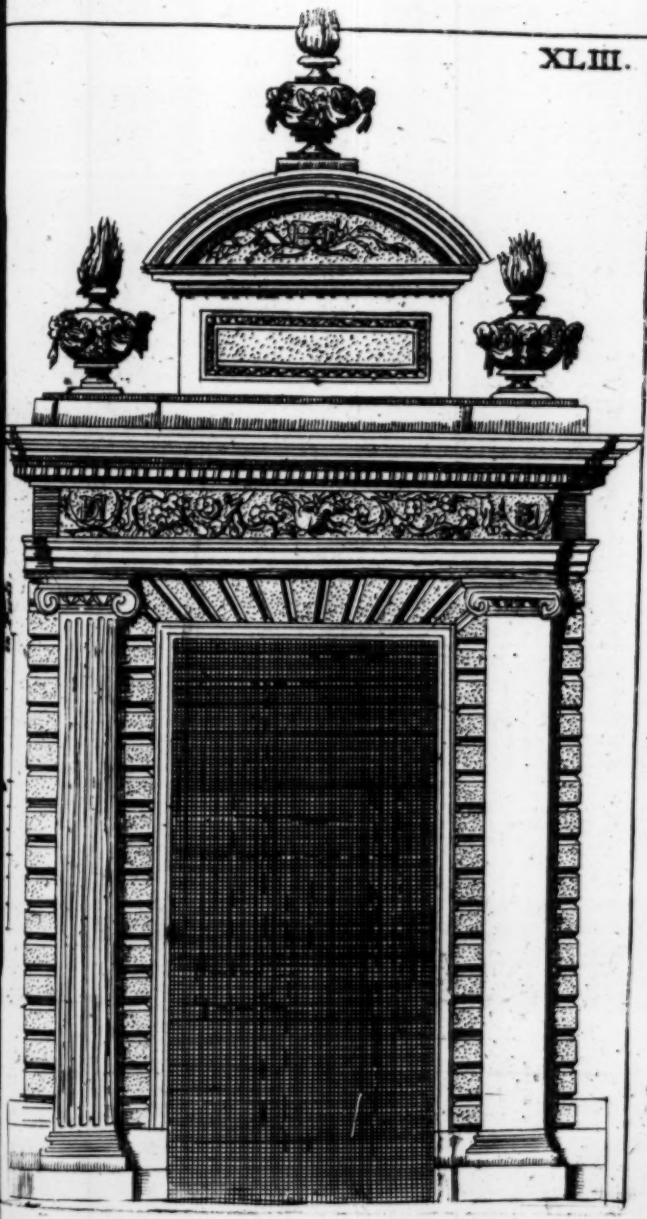


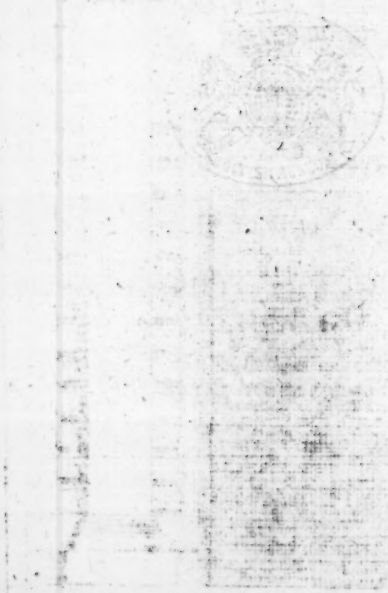
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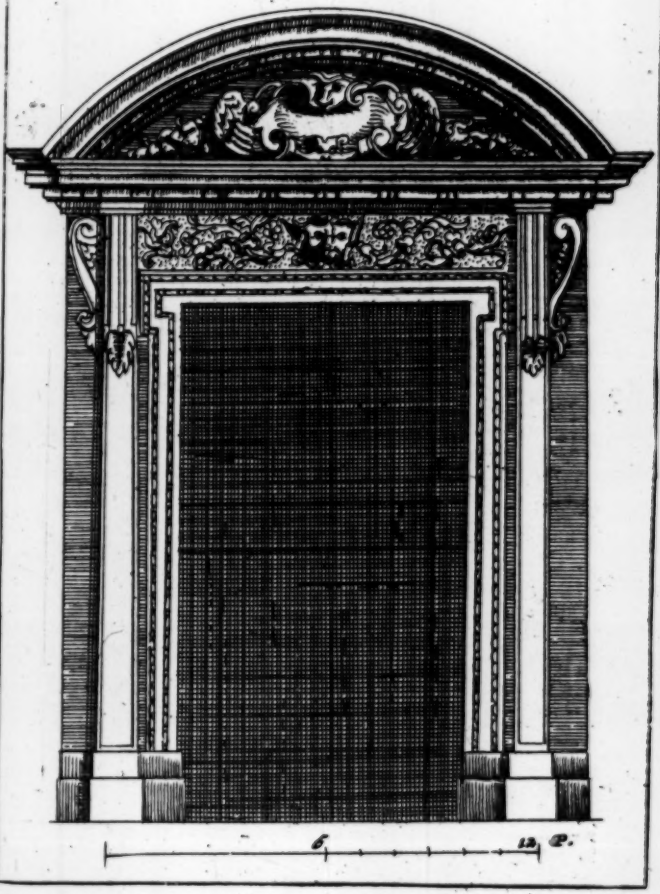


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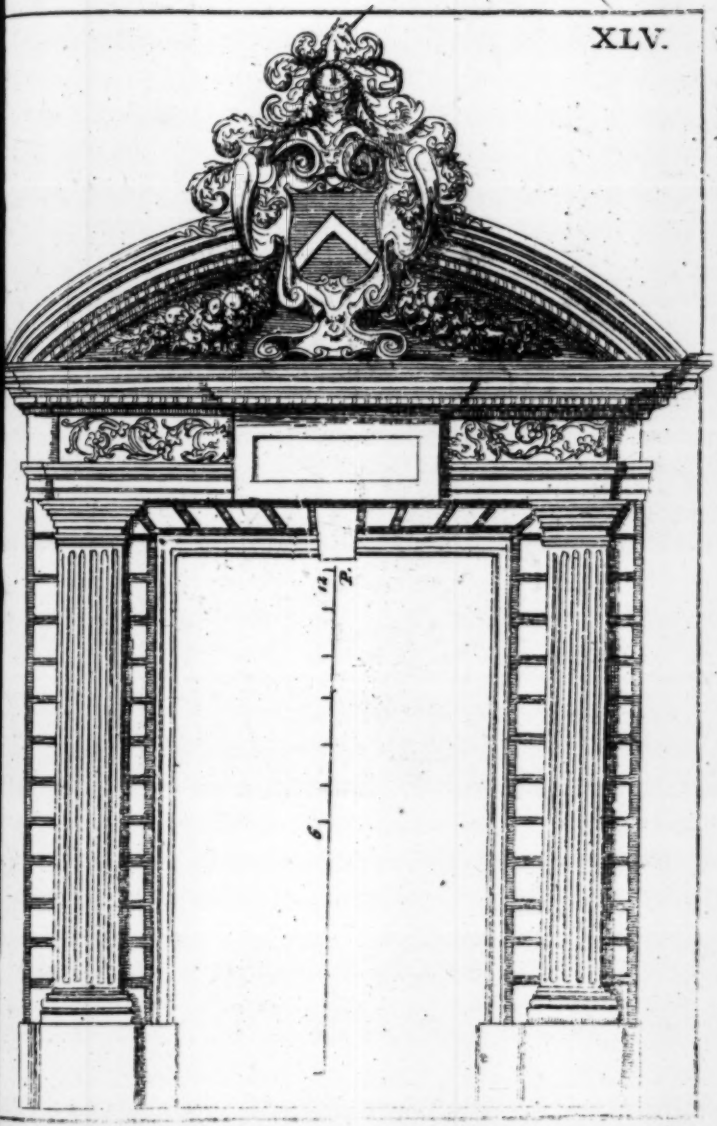


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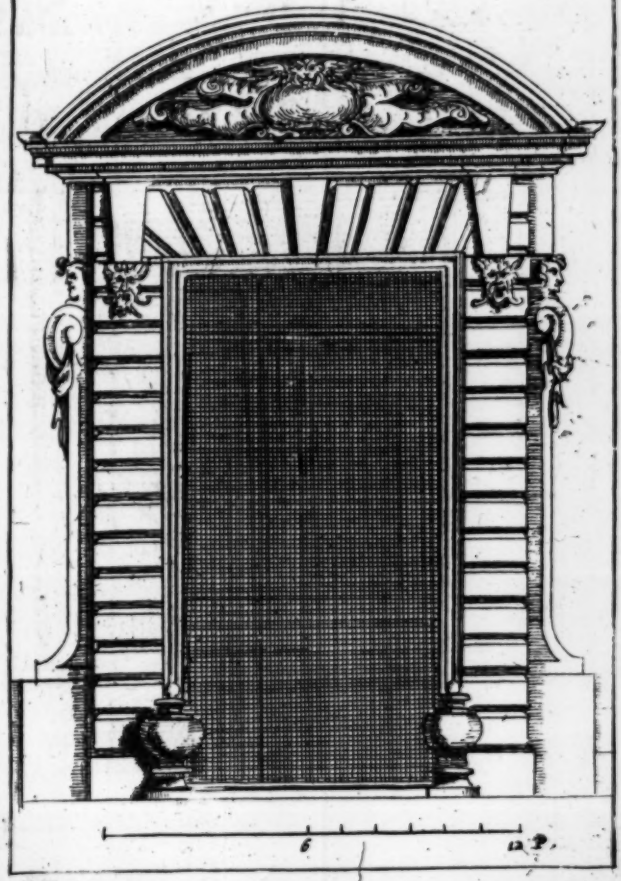


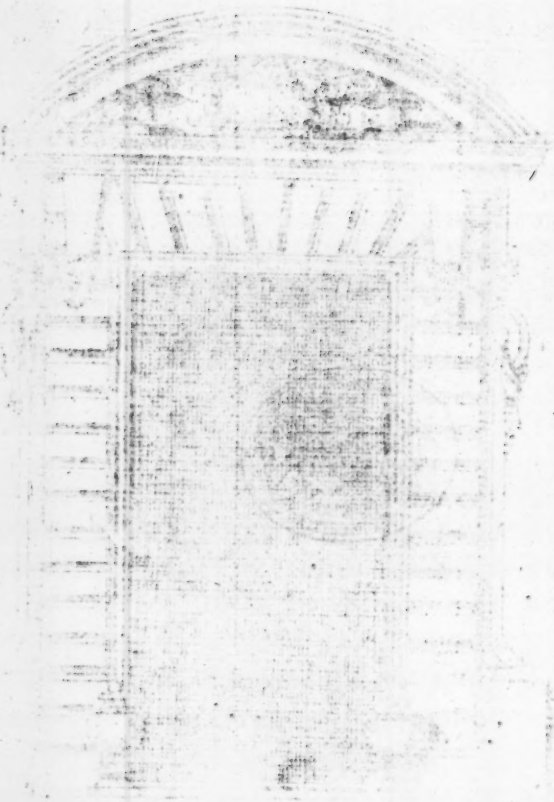


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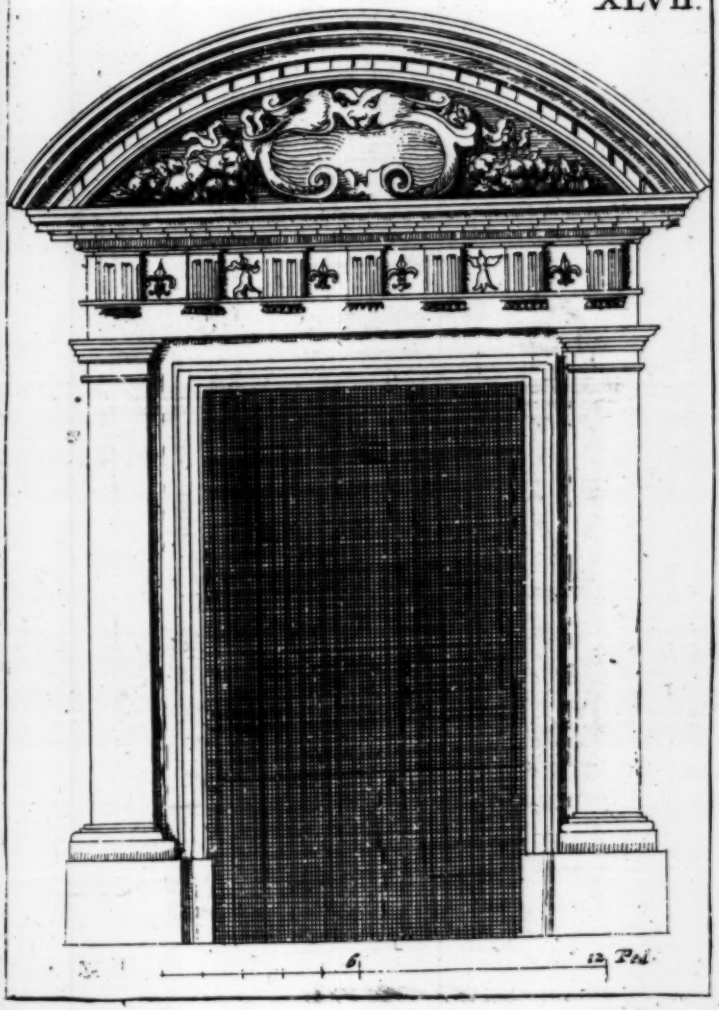


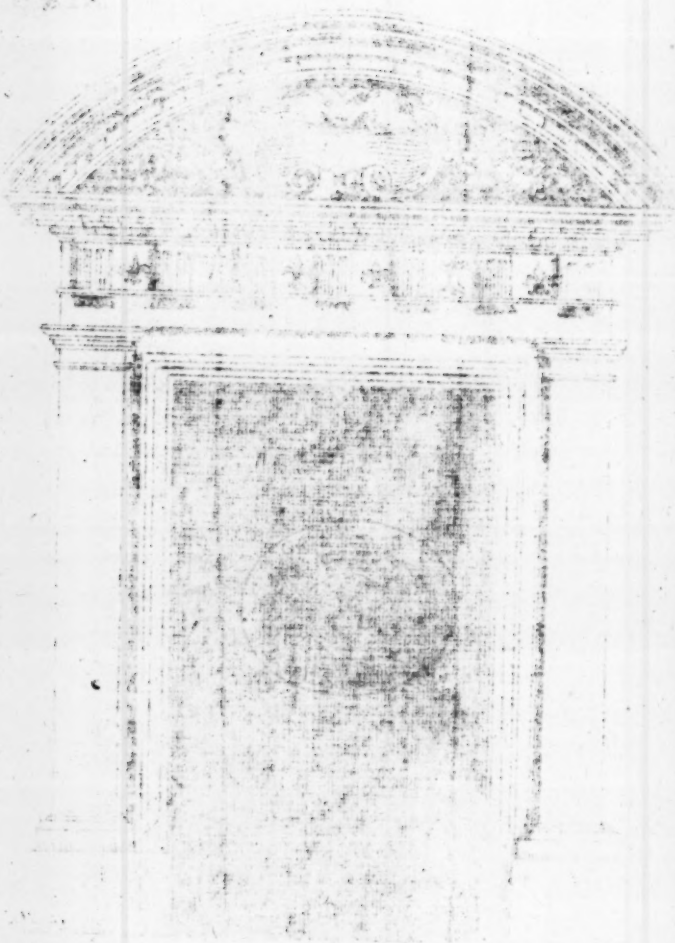
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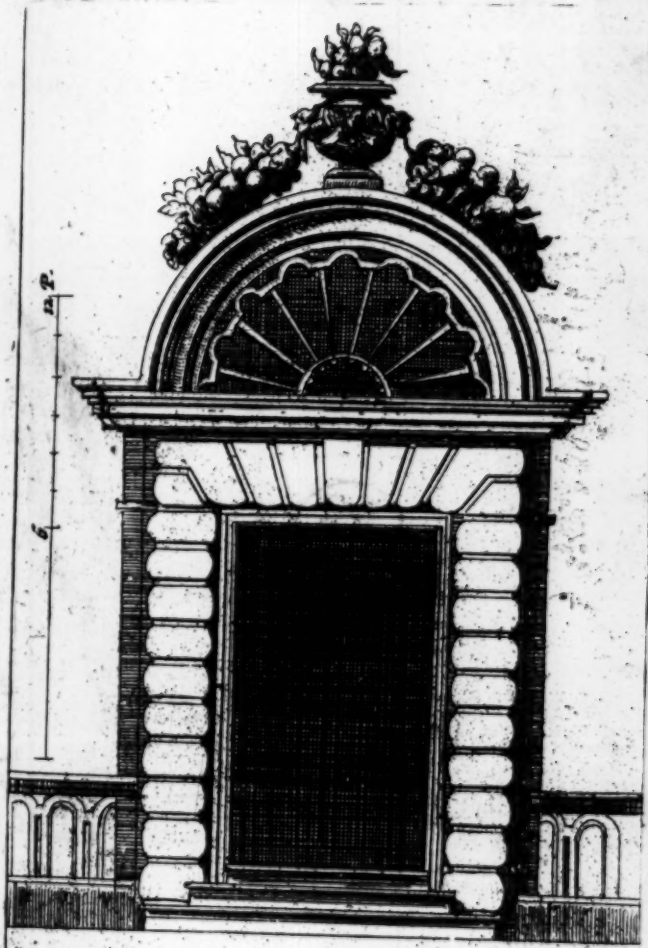
XLVII.






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XLIX.

